

The Collector of Customs, Chittagong, reports that the imports were influenced by increase of trade and higher rate of duty imposed on liquors. The Collector of Customs, Calcutta, explains the statistics for the Port of Calcutta in 1920-21 as follows :—

**"Ale, Beer and Porter.**—A very large increase in imports from the United Kingdom has to be recorded, the figure reached being 559,586 gallons. This displaced much Japanese beer, imports of which fell to 106,260 gallons, while prohibition almost entirely eliminated imports from the United States. Only limited quantities of Dutch and German beers have yet appeared on the market.

**"Spirits.**—Imports of brandy from France, after a bad year in 1919-20, recovered to a more normal figure, 83,880 gallons. More *whisky* was imported, practically all from the United Kingdom, and other sorts of spirits also advanced, except *rum* from Java, reduced imports of which account for the considerable decline in the total figure. Of 146,615 gallons imported from Java, nearly one-third was denatured on landing.

**"Wines.**—Imports of wines again advanced, particularly champagne and other sparkling wines and still red wines other than port. There was a falling off in imports of vermouth mainly due to the disappearance of the Spanish substitute which enjoyed a certain sale, *faute de mieux*, during the war.

"Generally speaking, imports of liquors were greater than consumption and stocks in bond increased during the year. An exception is afforded by rum, of which 98,615 gallons were bonded, while 48,090 gallons potable spirit together with 81,707 gallons denatured before clearance, were removed from the warehouses."

The Customs Department have kindly furnished the following statistics of imports and issues on payment of duty of potable foreign spirits at the Calcutta Custom House :—

YEARS.	IMPORTED (L. P. GALLONS).				ISSUED ON PAYMENT OF DUTY (L. P. GALLONS).			
	Brandy, whisky, rum and gin.	Java arrack.	White and rectified spirits.	Total.	Brandy, whisky, rum and gin.	Java arrack.	White and rectified spirits.	Total.
1918-19	384,376	138,833	...	523,209	251,391	3,484	210	255,085
1919-20	334,147	133,847	...	467,994	276,021	42,138	255	318,414
1920-21	292,967	168,477	319	461,763	268,037	78,162	319	346,518

#### WINES AND SPIRITS (OTHER THAN MEDICATED WINES AND COMMERCIAL SPIRITS) AND BEER.

36. **Licenses and Revenue.**—The total number of licenses issued for wholesale and retail vend was 727 against 597 in the preceding year. There were increases under heads "Wholesale" (2), "Retail-off" (5), "Dining cars" (1), "Steamer" (11), "Temporary bars" (85), "Canteen" (3) and "Late Closing" (25) and decreases under heads, "Retail-on" (1) and "Hotel" (1). The increase was due mostly on account of grant of temporary bar licenses for special occasions.

The total receipts from license fees amounted to Rs. 3,22,358 against Rs. 3,01,869 in the previous year.

The receipts from duty were Rs. 10,35,077 against Rs. 8,82,456 in the preceding year. The increase in the amount of duty realised in the year was due to larger issues of Indian-made rum and the raising of duty on potable foreign spirit with effect from 1st March 1921.

38. **Rum and other potable foreign liquors manufactured in India.**—The following quantities of rum and other potable foreign liquors manufactured in India were issued during the year from distilleries and Excise warehouses in Bengal :—

Place of manufacture.	Issued on payment of full duty.		Issued at the concession rate of duty.		Issued duty free.	
	L. P. gallons.		L. P. gallons.		L. P. gallons.	
<b>Rum—</b>						
Konnagore ...	...	1,370	40	...	...	...
Russa ...	...	6,600	...	...	...	...
Asansol ...	...	28,280	600	...	...	...
Shahjahanpur ...	...	17,241	...	...	600	...
<b>Brandy—</b>						
Russa ...	...	1,430	...	...	...	...
<b>Whisky—</b>						
Russa ...	...	455	...	...	...	...

Konnagore rum was issued at the concession rate of duty to the Military Police of Assam and Asansol rum to the Lakhimpore Battalion.

Duty-free issues of rum were made to the Campbell Medical School, Mayo and Medical College Hospitals, Calcutta, and to the Government Lunatic Asylum, Berhampore.

39. **Locally manufactured beer.**—The two breweries licensed in the preceding year took out licenses also during the year under report, but only the brewery at Sonada manufactured beer during the year. Owing to the difficulty of obtaining barley, the brewery at St. Mary's Seminary, Kurseong, remained closed throughout the year, though a license was taken by the curator.

Duty was charged on 11,501 gallons against 54,436 gallons in the preceding year. The decrease in manufacture was due to smaller quantities being taken by the Military authorities. The Japanese beer, which was cheaper in price, also competed with the locally made beer to some extent.

Receipts from license fees and duty amounted to Rs. 3,400 against Rs. 15,476 in the previous year.

#### MEDICATED WINES AND RECTIFIED SPIRITS.

39. **Licenses and revenue.**—The number of licenses for the retail sale of medicated wines and rectified spirits were 158 and 34, respectively, against 138 and 31 in 1919-20. The revenue from license fees was Rs. 9,000 against Rs. 8,950 in the preceding year.

40. **Manufacture and issue of rectified spirits.**—Rectified spirits were manufactured in the distilleries at Asansol, Konnagore, Russa and Bahir-Mirzapur Road, Calcutta.

The following quantities of rectified spirits were issued during the year for medicinal, industrial and scientific purposes from distilleries and Excise warehouses in Bengal :—

Place of manufacture.	On payment of duty.		Duty-free.	For manufacture of tinctures and absolute alcohol in bonded laboratories.
		L. P. gallons.	L. P. gallons.	L. P. gallons.
Asansol ...	...	18,826	4,329	36,446
Konnagar ...	...	9,402	22	1,977
Russa ...	...	3,033	32	671
Bahir-Mirzapur Road ...	...	8,526	48	3,985

Besides the above, 4,993 L. P. gallons of rectified spirits were issued under bond from the Asansol distillery to the United Provinces.

Asansol spirit was issued duty-free to the Director, Zoological Survey of India, to the Medical Store-Keeper to Government, to the Officer in charge of the Mathematical Instrument Office, Calcutta, and to the Agricultural Chemist, Sabour; Konnagore spirit to hospitals and the Photo and Litho Office, Calcutta; Russa spirit to the Controller, Printing and Stamps, Calcutta, to the Agricultural Chemist and to the Fibre Plant, Dacca, and Bahir-Mirzapur spirit to the Calcutta Corporation and Charitable dispensaries.

Duty-free issues were also made through Messrs. Smith Stanistreet & Co., Messrs. B. K. Pal & Co., and Dr. K. C. Bose from the warehouses attached to their bonded laboratories, to charitable dispensaries in Bengal, Bihar and Orissa and Assam.

41. **Manufacture of tinctures, etc., in Bonded Laboratories.**—Four bonded laboratories manufactured tinctures, etc., during the year under report as in the previous year. Besides, a new bonded laboratory has been opened by the Bengal Chemical and Pharmaceutical Works since February 1921. Duty was paid on 7,784 proof gallons of spirit contained in tinctures and medicinal preparations issued from the four laboratories, whilst medicinal preparations containing 10,078 proof gallons of spirit were issued duty-free to charitable dispensaries in the various provinces.

#### SECTION IV.—Nemp drugs.

##### GANJA.

47. **Retail Licenses.**—The total number of licenses issued in the Presidency for the retail sale of ganja was 1,267 as compared with 1,263 in 1919-20.

48. **Consumption of ganja.**—The total quantity of ganja consumed in the Presidency amounted to 1,840 maunds 26 seers as compared with 2,052 maunds 6 seers in 1919-20, a decrease of 211 maunds 20 seers. Consumption decreased in eighteen districts and increased in nine. The decrease exceeded 10 per cent. in five districts, viz., Dacca, Noakhali, 24-Parganas, Midnapore and Khulna, and 20 per cent. in Mymensingh (108 maunds or 38·89), Darjeeling (4½ maunds or 34·71), Rangpur (30 maunds or 31·56), Jalpaiguri (11½ maunds or 28·81), and Faridpur (12½ maunds or 22·67). Elsewhere in which a large decrease also occurred is Calcutta (23 maunds 28 seers). The fall in consumption was due to higher price and stricter control under the Bengal fixed-fee system.

The only district in which the increase exceeded 20 per cent. was Dinajpur (14½ maunds or 25·86). The increase exceeded 3 maunds in Tippera (11 maunds 25 seers), Rajshahi (10 maunds 16 seers), Malda (7 maunds 22 seers), Bogra (6 maunds 21 seers) and Murshidabad (6 maunds 1 seer). These districts were under the auction system during the year. The lower rate of retail price may, to some extent, be taken as the general cause of increase.

49. **Total revenue.**—The total receipts for the year amounted to Rs. 38,16,458 against Rs. 36,47,148 in 1919-20, an increase of Rs. 1,69,310. There was a fall of Rs. 79,511 in the receipts from duty, whilst receipts from license fees increased by Rs. 2,48,821.

50. **Incidence of Taxation.**—The incidence of license fees per seer of ganja consumed was Rs. 30 and that of duty Rs. 20. The total taxation was Rs. 50 per seer as compared with Rs. 43·9 in the previous year.



53. **Cultivation and outturn of ganja at Naogaon in Rajshahi.**—The number of applications to cultivate *ganja* received last season (1921) was 2,542 for an area of 3,958 bighas, as compared with 3,087 applications for an area of 6,111 bighas in the previous year. One thousand nine hundred and ninety-three licenses covering an area of 2,802 bighas 4 cottahs and 10 chittaks were granted, as compared with 2,207 licenses covering an area of 1,999 bighas 11 cottahs and 14 chittaks in 1919-20. The area actually cultivated with *ganja* was 2,700 bighas and 14 chittaks against 1,972 bighas 14 cottahs and 1 chittak in the preceding year. The area under cultivation, as usual, was strictly tested, and, as a result, a very large number of cases of change of plots was detected. This irregularity arose out of a misconception on the part of the cultivators, who could not locate the plots licensed correctly. The prospects of the crop were not favourable from the beginning. Unusually heavy rainfall in September and October seriously damaged the seedlings. The floods which followed the rains both in September and October also caused much damage to them. The cultivators took the utmost care to make good the loss. Fresh nurseries were prepared and some portions of the *ganja* fields were retransplanted, and it was apprehended that the outturn of the crop would be less than the normal. The difficulties of the cultivators were not yet gone. In November a kind of caterpillar locally called "*Tamakur poka*" and red spider appeared in the *ganja* fields, but the damage by these pests was not appreciable. The outturn after all proved to be better than what had been anticipated being 2 maunds 21 seers 7 chittaks per bigha. The total quantity of *ganja* stored in the public *golas* amounted to 6,847 maunds 29 seers and 1 chittak as compared with 4,569 maunds 18 seers 2 chittak in the preceding season.

#### BHANG.

58. **Licenses and revenue.**—The number of retail licenses in the year under report was 261 against 249 in 1919-20. Four shops were opened in Mymensingh, three in Rangpur, two in the 24-Parganas, one each in Burdwan, Noakhali and Bogra, with the approval of the Advisory Committees. The total number of druggists' permits issued was 355 as compared with 358 in the preceding year. The total revenue from license fees and duty amounted to Rs. 1,77,635 as compared with Rs. 1,61,477 in 1919-20, an increase of Rs. 16,158.

59. **Consumption.**—An appreciable demand for *bhang*, as in the previous year, was chiefly confined to most of the Western Bengal districts. In Eastern Bengal, Dacca is the only district in which there was a considerable demand for the drug. In the other districts in the Province the consumption, as usual, was very small. The total consumption within the Presidency amounted to 780 maunds 3 seers against 724 maunds 19 seers in the previous year. The increase exceeded 5 maunds in Calcutta (32 maunds 16 seers), Burdwan (13 maunds 29 seers), 24-Parganas (6 maunds 19 seers), Hooghly (5 maunds 30 seers) and Midnapore (5 maunds 4 seers). The increase in Calcutta was partly due to the influx of up-country men in the town and partly to higher price of *ganja*. The Collector of Burdwan reports that the increase in that district was partly due to the Kavirajes having taken their supplies of the drug from the licensed shops. The increase in the other districts was also due to higher price of *ganja*.

Two maunds and twenty-five seers of duty-paid *bhang* were exported from Hooghly to French Chandernagore. Tippera supplied 8 seers to the adjoining state of Hill Tippera. Sixteen maunds and twenty seers of *bhang* were exported from Naogaon to Manbhum in Bihar and Orissa.

#### CHARAS.

60. **Licenses and revenue.**—Twenty-nine retail licenses were in force during the year, as in 1919-20. Four wholesale licenses were issued against

three in the previous year, one in each of the districts of Birbham and Dinajpur and two in Calcutta. This year again, the wholesale dealer of Dinajpur did not import any *charas* from the Punjab. The total revenue amounted to Rs. 67,693 as compared with Rs. 78,039 in 1919-20, a decrease of Rs. 10,346.

**61. Imports, exports and consumption.**—The total quantity of *charas* imported into Bengal was 23 maunds 33 seers against 28 maunds 25 seers in the preceding year. The wholesale dealers in Calcutta and Birbham imported the drug direct from the Punjab and supplied the retail vendors throughout the Presidency.

The total issues to retail shops in the Presidency amounted to 24 maunds 18 seers as compared with 28 maunds 32 seers in 1919-20, the excess of issues over the imports being met from the last year's balance. There was a noticeable fluctuation—a decrease of 3 maunds 15 seers in Calcutta, due to the strike on the North-Western Railway in the early part of the year under report, which cut off the supply of *charas* from the whole of Bengal for over two months.

Seven seers of *charas* were exported to Bihar and Orissa, as compared with 9 seers in the preceding year.

#### SECTION V.—Opium.

**62. Restricted supply of opium.**—Under this system the issue of Excise opium to retail shops is fixed according to the estimated local demand. All the shops in Midnapore, Hooghly, Howrah, the 24-Parganas, Calcutta, Khulna, Bakarganj, Faridpur, Chittagong, Noakhali, Tippera and Jalpaiguri and a certain number of shops in Burdwan, Nadia, Jessore, Darjeeling, Mymensingh, Murshidabad and Rajshahi continued to work under this system. It was extended to five more shops in Nadia during the year under review and though it was not found necessary to bring more areas under the operations of this system, the issues of opium continued to be regulated and were limited as far as possible to *bona fide* local consumption. The system has some inherent defects, and efforts will be made to remove these defects as early as possible.

**63. License for retail sale.**—The total number of licenses issued for the retail sale of excise opium was 835, as compared with 828 in the previous year. The increase was due to the opening of three new shops in the 24-Parganas and one each in Burdwan, Mymensingh, Tippera and Noakhali. All the new shops were opened with approval of the Advisory Committees concerned. No shop was abolished during the year under report.

**64. Permits and license under the Opium and Morphia Rules.**—The total number of permits and licenses was 1,164 as compared with 951 in 1919-20. The number includes 32 licenses to manufacturing chemists, 409 to dispensing chemists, 81 to *Kabirajes* and *Hakims* and 57 permits to permit-holders (total 579 for intoxicating drugs) and 38 licenses to dealers, 419 to chemists, 52 to persons approved under rules 21(1) and 21(2) of the Morphia Rules and 76 persons authorised under rule 22 of the same rules (total 585 for Morphia drugs).

**65. Consumption.**—The consumption of excise opium during the year was 1,065 maunds and 34 seers, as compared with 1,038 maunds and 5 seers in the previous year, showing an increase by 27 maunds and 29 seers or 2·67 per cent. The consumption increased in 17 districts and decreased in 9. The largest increases occurred in Bogra (60 seers or 20·8 per cent.), Tippera (41 seers or 15·2 per cent.), Dinajpur (91 seers or 14·2 per cent.), the 24-Parganas (418 seers or 8·2 per cent.), Bankura (54 seers or 7·4 per cent.), Pabna (17 seers or 6·3 per cent.), Howrah (90 seers or 5·9 per cent.), Midnapore (195 seers or 5·4 per cent.), Hooghly (147 seers or 5·4 per cent.), Malda (61 seers or 5·4 per cent.) and Rajshahi (25 seers or 5·3 per cent.). The increase in Calcutta was by 492 seers, but the percentage of increase

was small. In Bogra and Pabna the increase was due to increased sales in the shops situated close to the borders of the Rangpur district where retail prices were high since the introduction of the fixed-fee system. The increase in Tippera was due to increased allotments to some shops, in Dinajpur to the improved condition of the consumers and to better management of shops, in the 24-Parganas to the opening of three new shops and to increased allotments to some shops, in Bankura to gradual reversion to normal conditions after the famine year of 1915-16, in Howrah and Hooghly to a certain class of consumers taking their supplies from local shops instead of from Calcutta as previously on account of restriction of sales at the latter place, in Midnapore to the prevention of import of opium from Balasore and Singbhum. The noticeable decrease occurred in Rangpur (215 seers or 20·8 per cent.), in Nadia (109 seers or 12·6 per cent.), and in Darjeeling (28 seers or 10·9 per cent.), and it has been ascribed to the following causes:—in Rangpur to high retail prices of the drug and the rise in prices of the necessities of life, in Nadia and Darjeeling to the extension of the restrictive system of supply to some shops. In no other district did the decrease exceed 10 per cent.

**66. Total receipts.**—The total receipts amounted to Rs. 34,00,913 as compared with Rs. 32,48,820 in 1919-20. There was an increase of Rs. 1,52,093 or 4·6 per cent., which occurred mostly under the head of "License fees."

**67. Morphia and Opium pills.**—The use of morphia as a substitute for opium does not appear to have been prevalent in any of the districts. No sale of opium pills was reported during the year under report.

#### SECTION VI.—Cocaine.

**70. Licenses and revenue.**—Three hundred and twenty-one licenses were issued during the year to chemists and druggists for the sale of cocaine, as compared with 287 in 1919-20. Forty-three permits for the possession of cocaine were issued free to managers of hospitals or dispensaries not under Government supervision, viz., sixteen licenses for tea gardens in Jalpaiguri, eight for charitable dispensaries in Burdwan, four in Tippera, three in the 24-Parganas, two in each of the districts of Midnapore, Calcutta, Nadia and Bakarganj and one each in Khulna, Faridpur, Noakhali and Rajshahi. Twenty-one permits were issued to qualified medical practitioners and dentists in Calcutta, four in Chittagong, three in each of the districts of Burdwan and Dinajpur, two in Faridpur and one each in Midnapore, Murshidabad, Jessore, Noakhali and Tippera for possession and use of the drug in the course of their practice.

**71. Preventive operations and illicit transactions.**—Italian cocaine was seized in one case in a large quantity on board an Italian steamer. German and Austrian stuff was not seized in many cases. The abuse of cocaine continues in the Calcutta district and in the neighbouring parts of the 24-Parganas and Howrah and in the districts of Burdwan and Hooghly. A cocaine case was detected each in Midnapore and Faridpur. The number of persons convicted of illicit possession, sale or smuggling of cocaine decreased from 275 to 248. In Calcutta the number was 215 as compared with 244 in 1919-20. An account of some important cocaine cases will be found in Section VII of this report.

The total quantity of cocaine seized in Bengal during the year was 18 lbs. 6 ounces and 106 grains as compared with 33 lbs. 3 ounces and 29½ grains in 1919-20. Only 36 ounces and 397½ grains were seized outside the Calcutta district, and of this quantity 35 ounces 319 grains were seized in the 24-Parganas. In Calcutta 130 ounces and 156½ grains were seized by Excise officers, 120 ounces by Customs officers, 6 ounces and 419 grains by Police officers and 3 grains by other officers.



## SECTION VII—Offences against the Excise and Opium Laws

## 73. Prosecutions and conviction.—

The total number of persons arrested during the year was 6,183 as compared with 6,651 in the previous year. Of these, 5,764 were convicted during the year against 6,038 in 1919-20. The number of arrests increased in 10 and decreased in 16, out of the 27 districts in the Presidency of Bengal. The increase was most marked in Bankura (246), Birbhum (222) and Hooghly (216). In Bankura the increase was due to a better *mohua* crop. Almost all of the offenders in this district came from the aboriginal tribes. In Birbhum it was due to the illicit manufacture of *pachwai* for private consumption, whilst the increase in Hooghly was due to the prevalence of the manufacture of *pachwai* by the Santals in the Sadar subdivision and of *tari* in the tree-tax areas (Sadar and Serampore subdivisions). On the other hand the decrease was largest in Midnapore (421), Calcutta (196), Rajshahi (90), the 24-Parganas (89), Mymensingh (58), Rangpur (57) and Murshidabad (56). The decrease in Midnapore is said to have been due to paucity of officers owing to frequent casualties among the preventive staff. In Calcutta it was due to the reduction in the number of petty cases. In Rajshahi the decrease was due to (1) better prevention of smuggling of *ganja* from the ganja Mahal, (2) arrest and conviction of several informers who were principal smugglers, and (3) the detection of large number of cases in the previous year. In Mymensingh the deterrent effect of the previous year's punishments made the offenders to be on their alert which resulted in the fall of arrest. The decrease in Rangpur was due to the fact that importation of any quantity of excisable articles even worth one pice, from Cooch Behar into British territory, was treated as offence during 1919-20. This rule was ultimately modified under which *bona fide* travellers were allowed to bring with them one tola of every kind of drug for personal consumption and also, partially, to the detection of a large number of petty *bhang* cases in the preceding year.

74. Classification of offences.—Four hundred and eighty-two persons were arrested for "illicit distillation" and 144 for possession or sale of "illicit country spirit" as compared with 453 and 378, respectively, in the preceding year. The chief increases under these two heads taken together occurred in Bankura (66) and Chittagong (11) and the chief decreases in Midnapore (140), Hooghly (56), the 24-Parganas (45), Calcutta (13), Howrah (12) and Darjeeling (11). In the Barrackpore subdivision of the 24-Parganas, the Excise Superintendent detected an important case of illicit distillation of country spirit with a large amount of materials and implements within a very short distance of the Tittaghar country spirit shop. The accused was distilling liquor in collusion with the local country spirit vendor to the loss of Government revenue. The accused was sentenced to two months' rigorous imprisonment. In another case in that district one of the accused was a member of the Panchayet of an Union and was an influential man and had a gun license. He was distilling liquor in order to put his enemy into trouble by introducing the liquor into his house. He was sentenced to a fine of Rs. 300 in default three months' rigorous imprisonment. In Mymensingh the people, who resorted to illicit distillation, were invariably the hill tribes. Their implements were primitive and the liquor was used for domestic consumption as well as for sale. A case of illicit distillation of "Mrita Sanjibani Sudha" was detected in Faridpur. A priest of a Raj family at Natore, in Rajshahi, was prosecuted and sentenced to pay a fine of Rs. 100 for illicit possession of materials and apparatus intended for illicit manufacture of country spirit. In Jalpaiguri almost all the illicit distillation cases were detected in the tea gardens and the offenders were generally Paharias and Bhutias. The tea garden coolies of Darjeeling were also the offenders in the majority of illicit distillation cases. Illicit distillation prevails to some extent in parts of Sadar and Pirojpur subdivisions as well as in the Sunderbans area of the Backerganj district.

Antipur town in Nadia district a few cases of transport of illicitly distilled liquor for sale amongst prostitutes and in the grocers' shops were detected during the year of report.

The number of arrests under the head "unlicensed sale of duty paid country spirit" fell from 132 to 115. The decrease occurred principally in the 24-Parganas and Calcutta due to the introduction of more honest and better class of vendors.

The arrests for "illicit possession of duty paid country spirit" decreased from 48 to 29. The decrease is due to ordinary fluctuation.

The prosecution of illicit import, export or transport of country liquor increased from 87 to 139 or by 52. Hooghly is credited with the whole of the increase. The offence has been well controlled by the special staff. In Darjeeling the smuggling of Nepal and Sikkim liquor was chiefly carried on at night through the agency of women.

The number of arrests for "illicit sale of foreign liquor" rose from 56 to 88 or by 32, of which Calcutta alone contributed 25.

There were 1,524 arrests under the head *tari* against 1,609 in the previous year. The decrease has no special significance. This crime is common amongst the lower classes (especially the up-country people) in the Burdwan and Presidency divisions.

The arrests under the head "illicit manufacture, possession or sale of *pachwai*," rose from 1,634 to 1,940 or by 306 persons. The increase was most marked in Birbhum (214), Bankura (169), Hooghly (130) and the 24-Parganas (56), whilst the decrease was most marked in Midnapore (205) and Burdwan (28). The increase in Birbhum, Bankura and Hooghly and the decrease in Midnapore have already been explained in paragraph 73 above.

Three persons were arrested for "illicit cultivation of poppy" against 10 in the preceding year. Taking the figures under the 2 heads "illicit opium" and "Treasury opium" together, the number of arrests decreased from 524 to 372 or by 152. The arrests decreased by 96 in Calcutta, 48 in Midnapore, 12 in the 24-Parganas and 11 in Nadia. The total quantity of opium seized in Bengal amounted to 68 maunds 6 seers of which 43 maunds 34 seers were seized in Calcutta alone. Thirteen maunds one seer were seized by the special staff at different railway stations. The Customs Officers made 32 seizures amounting in all to 3 maunds 21 seers. Thirty-three maunds 8 seers were seized by the Excise Officers in Calcutta as compared with 27 maunds 9 seers in the preceding year. Two maunds 34 seers have been seized by each of the Calcutta Police and the Howrah Railway Police. Some important arrests were made by the Calcutta Excise and the special staff. Mention may, however, be made of four important cases detected by the Calcutta Excise staff. In the first case, the Superintendent of Excise, Preventive Branch, arrested one Golam Hosain *alias* Bishambar Prosad, a notorious opium and cocaine smuggler, with 44½ seers of opium. He was arrested in the present case just four months after his release from Naini Jail for a similar offence for which he was arrested in Allahabad in November 1919. He was also convicted under section 467, Indian Penal Code, and sentenced to undergo three years' rigorous imprisonment at Burdwan in 1915. He wanted to hide his identity and his previous convictions and was therefore dressed as a Muhammadan. He gave his name as Golam Hosain but his real name and previous convictions were traced out with his finger prints and careful enquiry. He was for a long time the right-hand man of the notorious Calcutta smuggler Surjee Prosad. He was convicted and sentenced to undergo one year's rigorous imprisonment. The second case was detected by an Inspector of Excise. One Jahandar Khan, a landholder and an influential man of terror of Ghazipore, who was dealing in contraband opium illicitly obtained from the local cultivators some of whom were his tenants, was arrested when he was trying to dispose of 66 seers of crude opium to a bogus *mahajan* set up by the Inspector. He was convicted and sentenced to nine months' rigorous imprisonment and to a fine of Rs. 1,000. The accused appealed before the Sessions Judge and the Allahabad High Court, where the Lower Court judgment was upheld and the appeal dismissed. In the 3rd case, one Baijnath Missir, a durwan of a notorious Chinese smuggler Seo Chang Hai with 5 *aliases*, was arrested by an Excise Inspector



for possession of 20 seers of opium, which the Chinaman used to keep away from his house through his durwan for fear of detection. The accused was convicted and sentenced to six months' rigorous imprisonment. In consequence of the detection of this case, the house of the Chinese smuggler Neo Chang Hai was searched and incriminating papers and documents were seized. Three registered post parcels sent from Calcutta to Rangoon were about this time seized in Rangoon. Each of the parcels was found to contain 6 seers of opium. The names of the addressees were found to be fictitious. The Rangoon Excise authorities wrote to Calcutta Excise to trace out the sender of those parcels. The Superintendent of Excise after carefully going through the papers already seized, was of opinion that Neo Chang Hai was sending opium in registered post parcels to Rangoon in fictitious names. When the coverings of the parcels were received, the Excise Superintendent compared the handwriting on the labels of those parcels with the handwriting in note books and other papers seized in the house of the suspect and found them agree. A postal receipt of one of the parcels was also found in the house of the offender Neo Chang Hai. A case was accordingly started against the man. He was also subsequently arrested by the Rangoon Excise at Rangoon on the identification of the Calcutta Excise Superintendent and his one of the Inspectors, who went there for the purpose for further investigation of the case. The accused was sentenced to undergo six months' rigorous imprisonment by the 3rd Presidency Magistrate, Calcutta. In the 4th case, one Latifuddin and 6 other Peshwaries (2 belonged to Rai Bareilly district, 3 to Shajahanpur, 1 each to Meerut and Muradabad) were arrested at Kharagpur Railway station by the Calcutta Excise Preventive staff, with the assistance of the Government Railway Police and the Special Excise staff, Kharagpur, on their way to Calcutta from Nagpur. These people were dressed as sepoy in full military uniforms with one Gore Khan as their Havildar. They took a very threatening attitude at the time of their arrest and one of them actually brought out a knife with a view to assault a Government Railway Police Sub-Inspector. The opium seized was about 4½ maunds in weight and was declared, on analysis, to be Udaipur State opium. All the accused were convicted and each was sentenced to undergo one year's rigorous imprisonment and to pay a fine of Rs. 500, in default to 6 months' additional rigorous imprisonment, except Gore Khan, who was convicted only for conspiracy. They appealed before the Sessions Judge, Midnapore, who upheld the sentences.

The following are some of the important seizures of opium sent by railway parcels from the different provinces outside Bengal:—

- (1) A parcel containing 20 seers of gola opium despatched from Sagaur to Howrah.
- (2) One parcel containing 18 seers of Malwa opium sent from Agra Cantonment to Howrah.
- (3) One steel trunk booked from Munda Road to Lilloah was found to contain 19 seers of opium.
- (4) One parcel from Kishori Pathan, Bombay Baroda and Central India Railway, to Tinpahar was found to contain 20 seers of gola opium.
- (5) Two parcels from Delhi to Howrah said to contain fruits were found to contain 50 seers of opium.
- (6) One parcel said to contain machinery booked from Delhi to Howrah, was found to contain about 18 seers of opium.
- (7) One parcel from Coconada Port to Calcutta Booking Office was found to contain 20 seers of Treasury opium.
- (8) Five crates said to contain glasswares booked from Nizamuddin near Delhi to Howrah were found to contain 73 seers of opium.

- (9) Four crates said to contain lanterns booked from Delhi to Howrah were found to contain 45 seers of opium.
- (10) One parcel from Jaynagar (Bengal and North-Western Railway) to Chakdah Railway station found to contain 13 seers of Treasury opium.

Twenty-two postal parcels containing about 64 seers of opium were seized in Calcutta during the year of report with fictitious names. Such parcels are reported to have been addressed to fictitious names and addresses, the delivery of which was made with the connivance of the delivery peons. These parcels came 7 from Rampore State, 3 from Jaypur State, 2 from Delhi and 1 each from Tanuku (Madras), Muzaffarpur, Mamtāul, Darbhanga, Amritsar, Etwa, Katamunda (Nepal), Moradabad and Meerut.

Some of the methods adopted by the smugglers to carry on their nefarious trade were the employment of carriers dressed as sepoy or khansamas and of Marwaries (men and women) and Anglo-Indians (men and women) travelling in 1st and 2nd class compartments. Opium was smuggled to a considerable extent in railway and postal parcels, in pillows, in beddings, in oil-cloth bags tied round waists of the railway passengers, in tea chests, in vegetable and fruit baskets, in oxygen cylinders, in bundles of peacock feathers, in felts, in crates said to contain glasswares, etc., in Ceylonese cocoanuts, in the sides of the boxes made hollow and in false bottomed boxes.

There were 290 arrests for "Illicit possession or sale of *modak* or *chandu*" against 339 in the preceding year. The chief decreases occurred in Midnapore (23) and the 24-Parganas (20).

The arrests for "Illicit cultivation or collection of *ganja* or *bhang*" increased from 70 to 87, of which Pabna alone is responsible for 14. In Dacca, specially in the Manikganj subdivision, there is much spontaneous growth of *bhang* and it is not possible to exterminate it. The illicit possession of *ganja* and wild *bhang* is one of the common offences in the district of Dinajpur. In Bogra, one Baula Majhi was arrested for unlicensed cultivation of 6 *ganja* plants and for possession of certain quantity of non-duty-paid *bhang*. He was convicted and sentenced to pay a fine of Rs. 15. In the Sadar subdivision of Rajshahi a case of illicit cultivation of *ganja* plants was detected which ended in conviction of the accused. Seven cases were detected in the Naogaon subdivision of that district for illicit possession of green *ganja* against 6 in the previous year. The total quantity of green *ganja* seized was 1 maund 4 seers 10 chittaks as compared with 2 maunds 18 seers 14 chittaks in the preceding year. A few cases of special importance are given below:—

- (1) One Dilban Sonar, who used to work as an informer from a long time, was suspected of smuggling of *ganja*. An Excise Sub-Inspector succeeded in purchasing 52 tolas of *ganja* from him. He was prosecuted and sentenced to three months' rigorous imprisonment.
- (2) One Jiar Ali Sheik was an informer but was also one of the leaders of a gang of smugglers. The Excise Sub-Inspector of the circle made arrangement through a bogus purchaser to purchase *ganja* from him and was successful. The man had one tola, while his accomplice had 13½ tolas of *ganja* in his person. He was sent up and sentenced to rigorous imprisonment for six months.
- (3) One Shona Sardar, who was a *ganja* cultivator, was arrested while making over 17 seers of green *ganja* plants through his accomplice Momin Sardar to a bogus purchaser arranged by an Excise Sub-Inspector. They were prosecuted and sentenced to undergo rigorous imprisonment for two months each.

(4) One Golap Singh was arrested by an Excise Sub-Inspector while attempting to carry 32 seers of green ganja plants with his companion Jangli Bana. The companion could not be arrested on the spot. The green ganja was cut in the previous night and was left in the ditches near by as it became dawn. He was sentenced to a fine of Rs. 200. The case against his companion is pending.

(5) One Bhola Mondol, who was an informer, was also a notorious smuggler and leader of a gang of smugglers. He manufactured ganja in a barley field and attempts were made to arrest him at the time of manufacture, but they failed. Subsequently when the ganja was removed to his house, a search was made there and 268½ tolas of ganja were found in different places within his house. He was prosecuted and sentenced to undergo rigorous imprisonment for 6 months.

The arrests for "Unlicensed sale of hemp drugs" decreased from 277 to 207 or by 70.

The prosecutions under the head "Illicit sale or possession of cocaine" were 277 as compared with 324 in 1919-20. Calcutta was principally responsible for the crime where alone 238 persons out of 277 were arrested for the offence. The 24-Parganas and Hooghly come next with 23 and 8, respectively. Nearly all the important cases occurred in Calcutta. The offenders in most of the important cases in Calcutta were either Chinamen or Japanese. The former, as in the previous year, were also extensively engaged in the contraband trade of opium. In the 24-Parganas, the majority of the cases took place in the Barrackpore subdivision where the drug used to be transported from Calcutta for sale in the mill areas. The trade being a lucrative one attracted many people. Big smugglers generally remained behind the scene to avoid arrest. A few important cases are mentioned below:—

A Japanese member of the crew of SS. "Tanda" was arrested in Calcutta while he was trying to dispose of 25 ounces of cocaine. He was sentenced to undergo rigorous imprisonment for one year. One Cassaro Rosaroo, the Chief Officer of the Italian Steamer "Ansaldo VI." was arrested in his own cabin for selling 33 ounces of cocaine to an Inspector of Excise, who posed himself as a *mahajan*. The case is the first of its kind and both the Inspector and his Petty Officer showed great skill, pluck and discretion in the detection of the case. They ran a risk of their lives when they entered the cabin of the Chief Officer with Rs. 1,800 to buy the cocaine as there were about 100 Italians round about the cabin and a word from the Chief Officer, if he had discovered their identity before his arrest, would have endangered their safety. The Calcutta Excise Staff were assisted very much by the Customs Preventive Officers in the arrest of the offender in this case. The accused was, however, leniently dealt with by the trying Magistrate and was sentenced to pay a fine of Rs. 1,000 only as the steamer could not leave the port without her Chief Officer. One Amulya Charan Das was arrested for possession of 12 ounces of cocaine near the Pattipukur Railway station in the 24-Parganas. The stuff was brought from Calcutta, and intended for sale in the mill area of the Barrackpore subdivision. The accused was dressed as a *bhadralok* and was travelling in a second class carriage when he was stopped. The cocaine was found tied to his waist. He was sentenced to rigorous imprisonment for four months. In another case in the same district one Gopal Chandra De was arrested at Belghuria with 10½ ounces of cocaine. The stuff was transported from a Calcutta smuggler and was intended for sale in the mill area of the Barrackpore subdivision. The accused came by rail from Sealdah and was proceeding to Jagatdal when he was induced by the informer to get down at Belghuria. A punishment of 12 stripes was inflicted on the accused by the Subdivisional Officer of Barrackpore.



THE CALCUTTA GAZETTE, MAR. 8, 1922.

## DEPARTMENT OF AGRICULTURE, BENGAL.

### Second Forecast of the Wheat Crop of Bengal, 1921-22.

**Note.**—On an average of the five years ending 1919-20, the area under wheat in Bengal has represented some 14 per cent. of the total area under wheat in India. The ratio of the irrigated wheat acreage to total wheat acreage is (a) British India and (b) in the territory now reported on has in the five years ending 1919-20 averaged (a) 42.3 and (b) 16.0 per cent., respectively.]

**Character of the season.**—As reported in the first forecast, the rainfall in September and October, though generally defective, was adequate for the preparatory tillage and for the sowings of the crop in normal time. Since then, prolonged drought and consequent lack of soil moisture has greatly affected the germination and growth of the crop in most districts, and the present condition of the crop, though a little improved in some northern districts by the scattered rain in January, is unfavourable on the whole.

**Area sown.**—According to the estimates of the District Officers, the total area sown amounts to 124,500 acres this year against 116,200 and 116,900 acres reported, respectively, in the corresponding and final forecasts of last year.

**Outturn.**—From the District Officers' estimates, the provincial outturn works out at 69 per cent. of the normal this year against 81 and 86 per cent. reported, respectively, in the corresponding and final forecasts of last year.

G. EVANS,

*Director of Agriculture, Bengal.*

*Dacca, the 27th February 1922.*

**SUPPLEMENT TO THE CALCUTTA GAZETTE, MAR. 8, 1922.**

**APPENDIX I.**

**Second Forecast of the Wheat Crop of Bengal, 1921-22**

District.	Estimated normal area under the wheat crop.	Estimated area under wheat.		Taking 100 to represent the normal, what would be the average outturn per acre cropped.		Data on which the sowing of the crop was begun this year and whether that date was early, normal or late.	Remarks by District Officers.
		Last year (1920-21).	This year (1921-22).	Last year.	This year.		
	Acrea.	Acrea.	Acrea.				
Nadia ...	22,100	12,500	12,100	50	42	Middle of November. Normal.	Since the submission of the first forecast, some more lands were sown in the Kuchlia subdivision causing an increase in area. Owing to the entire cessation of rain all through, the growth of the plants has been retarded and the outturn is expected to fall much below the normal.
Murshidabad ...	69,500	32,500	31,500	47	47	October to November. Normal.	The decrease in area is due to want of rainfall at sowing time. The weather has not been favourable. Continued drought has stunted the growth of the crop.
Jessore ...	2,500	500	200	20	20	October. Normal.	The weather has not been favourable and the growth of the crop not good. Much damage has been done by drought.
Burdwan ...	2,000	2,000	2,200	70	67	Middle of October. Normal.	The increase in area is reported from the Asansol subdivision. The weather has not been favourable and the outturn is expected to be below the normal.
Birbhum ...	4,100	2,000	2,100	32	50	Middle of November. Normal.	The weather has not been favourable. The decrease in outturn is due to insufficient rainfall.
Bankura ...	3,500	2,400	2,500	47	72	November. Normal.	The decrease in area is due to insufficient rainfall in November. The weather has been fair. The outturn is below the normal owing to insufficient moisture in the soil.
Midnapore ...	900	800	800	80	75	None.	The weather has not been favourable. The fall in outturn is due to drought.
Hooghly ...	2,400	1,700	1,700	67	67	Beginning of November. Late.	The weather has not been favourable. The outturn is expected to be much below the normal owing to absence of rain.
Rajshahi ...	15,000	2,800	2,500	190	63	November. Normal.	The increase in area is due to increase in price. The weather was unfavourable at the beginning owing to want of rain. But the recent rain has improved the condition of the crop. The outturn is expected to be below the normal for want of rain which has caused damage to the extent of two annas in the Batur subdivision.
Dinajpur ...	1,400	1,200	1,500	81	37	By the end of October. Normal.	The condition of the crop has improved by the recent rain. The outturn is expected to fall below the normal owing to unfavourable weather.
Jalpaiguri ...	800	500	500	30	30	First week of November. Normal.	The decrease in area is due to unfavourable weather at sowing time. Since the submission of the first forecast, the weather was favourable in Alipor subdivision but unfavourable in the Chakrajati estates in Baidar subdivision. The decrease in outturn is due to want of occasional showers.
Darjeeling ...	4,500	2,500	2,400	53	93	Last week of September. Normal.	The weather has been fairly favourable.
Rangpur ...	2,000	2,400	2,400	100	100	Beginning of November. Normal.	The weather has been favourable and a normal outturn is expected.
Bogra ...	100	800	800	30	80	Middle of November. Normal.	The weather was not favourable since the submission of the first forecast, but the recent rains have freshened the crop and have been beneficial to its growth.
Pabna ...	16,000	7,000	6,500	67	67	None.	The decrease in area is due to indifference of cultivators to grow this crop. The weather was favourable for cultivation but continued drought since the sowing time has retarded the growth of the crop to some extent. About two-thirds of the crop have been damaged by drought.
Malda ...	40,000	40,000	40,000	100	75	End of October. Normal.	The decrease in area compared with the first forecast is due to continued drought after sowing and to revision of estimates. Continued drought has retarded the growth of the crop to some extent but the recent rain has somewhat improved the condition. Some damage has been caused by drought. The outturn is anticipated to fall below the normal for want of rain.
Dacca ...	4,100	4,300	3,900	64	63	Middle of November. Normal.	Want of timely rain has affected the growth of the crop and has caused some damage. The outturn is anticipated to fall much below the normal.
Mymensingh ...	500	...	500	...	100	Beginning of November. Normal.	The weather has been favourable and the outturn is expected to be normal.
Faridpur ...	2,700	2,900	2,900	55	46	End of October. Normal.	The increase in area is due to increased cultivation of the crop in the Gostardo subdivision. Want of rain has been detrimental to the growth of the crop and has caused damage to the crop to a considerable extent.
Total Bengal...	219,400	126,500	124,500	64	63		

\* Conventional area.

SUPPLEMENT TO THE CALCUTTA GAZETTE, MAR. 8, 1922.

## DEPARTMENT OF AGRICULTURE, BENGAL.

### Second Forecast of the Spring Oilseed Crops of Bengal, 1921-22.

[Note.—On an average of the five years ending 1919-20, the area under linseed in Bengal has represented some 5·3 per cent. and that under rape and mustard 19·0 per cent. of the total area under those crops British India.]

**Character of the season.**—As reported in the first forecast, the rainfall at the beginning, though defective, was adequate for the preparatory operations throughout the Presidency except in parts of West Bengal. Since then, with the exception of scattered rain in January, which was too late and proved insufficient, the weather has been dry and the consequent lack of soil moisture has adversely affected the crops specially in the western districts. As a whole, therefore, the season may be regarded as only fair for these crops this year.

**Area sown.**—Oilseeds are grown chiefly in the Rajshahi, Dacca and Presidency Divisions. In the other two divisions the cultivation is small. The total area under these crops (excepting sesamum for which separate forecasts are issued) is returned at 1,086,400 acres this year as against 1,037,500 acres and 1,035,800 acres, respectively, in the corresponding and final forecasts of last year. The decrease in area compared with the first forecast is due mainly to revision of Mymensingh figures on the basis of settlement records.

**Outturn.**—According to the estimates of the District Officers, the Provincial outturn of the different oilseed crops works out at 74 per cent. of the normal against 76 and 77 per cent., respectively, in the corresponding and final forecasts of last year.

G. EVANS.

*Director of Agriculture, Bengal.*

Dacca, the 27th February 1922.



APPENDIX I.

Second Forecast of the Spring Oilseed Crops of Bengal, 1921-22.

District.	Name of spring oilseed crops.	Estimated normal area under spring oilseeds.	Estimated area under spring oilseeds.		Taking 100 to represent the normal, what would be the average return per acre cropped.		Date by which the harvesting generally commenced this year, and whether that date was early, normal or late.	Remarks by District Officers.
			Last year (1920-21).	This year (1921-22).	Last year.	This year.		
24. Parganas	Linseed ...	1,800	600*	600*	75	75	End of December to February.	The weather has been favourable on the whole. The output is expected to be below the normal owing to want of rain which has caused damage to the extent of two annas in the Basirhat subdivision.
	Rape and mustard ...	3,000	800*	800*	75	67		
	Other oilseeds (excepting oil).	600†	300	300‡	67	61		
	Total ...	5,400	1,700	1,700	74	72		
Medinipur	Linseed ...	25,700	27,790	21,800	80	42	Not yet commenced	The contraction in area compared with last year is due to want of rain at sowing time. The entire cessation of rain all through the season has affected the growth of the plants and the output is expected to fall much below the normal.
	Rape and mustard ...	22,600	14,600	12,400	56	42	Middle of January. Normal.	
	Other oilseeds (excepting oil).	16,900	2,990	2,700‡	60	43		
	Total ...	65,200	45,380	36,900	70	42		
Murshidabad	Linseed ...	20,800	15,400	12,100	67	47	Not yet commenced	The decrease in area compared with last year is due to unfavourable weather conditions owing to continued drought which has stunted the growth of the crops to some extent and the output is expected to fall much below the normal.
	Rape and mustard ...	18,800	10,400	12,600	58	67	Middle of January. Normal.	
	Other oilseeds (excepting oil).	8,700	3,900	3,900	53	75	Not yet commenced.	
	Total ...	48,300	30,700	28,600	75	58		
Jessore	Linseed ...	24,000	9,800	9,400	58	50	End of January and February. Normal.	The increase in area under rape and mustard is due to revision made by the Subdivisional Officers. Owing to drought throughout the season, about 50 per cent. of the crops have been damaged.
	Rape and mustard ...	49,200	20,000	26,000	38	50		
	Other oilseeds (excepting oil).	3,800	3,100	1,800	38	50		
	Total ...	77,000	32,900	37,200	53	50		
Khulna	Linseed ...	900	200	200	67	67	End of January. Normal.	The increase in area is due to high price of oil. There has been no rain since the submission of the first forecast which has retarded the growth of the crops and the output is anticipated to be much below the normal.
	Rape and mustard ...	22,700	10,800	10,800	93	67		
	Other oilseeds (excepting oil).	600‡	100	600‡	100	33		
	Total ...	33,200	13,800	13,600	93	67		
Bardhaman	Linseed ...	6,600‡	6,100	6,400	66	58	February. Normal.	The decrease in area is due to early onset of rains. Owing to drought, the germination and growth of the crops have been poor. Some damage has been caused by drought.
	Rape and mustard ...	6,600‡	3,000	7,500	38	58		
	Other oilseeds (excepting oil).	200‡	200	200	53	60	Not yet commenced.	
	Total ...	13,400	9,300	14,100	53	58		
Birbhum	Linseed ...	800	600*	700	75	75	By the end of February.	The weather has not been favourable and the output is expected to fall below the normal.
	Rape and mustard ...	1,900‡	3,000*	1,800	75	75		
	Other oilseeds (excepting oil).	200	100‡	200	75	75		
	Total ...	2,900	3,100	3,700	78	75		

\* Conventional area.  
‡ Including the area under coconut.

† Includes the area of 100 acres under groundnut.  
‡ Revised.

# SUPPLEMENT TO THE CALCUTTA GAZETTE, MAR. 8, 1922.

Name of District.	Name of crop.	Estimated normal area under spring oilseeds.	Estimated area under spring oilseeds.		Taking 100 to represent the normal, what would be the average outturn per acre cropped.		Date by which the harvesting generally commenced this year and whether that date was early, normal or late.	Remarks by District Officers.
			Last year (1920-21).	This year (1921-22).	Last year.	This year.		
		Acres.	Acres.	Acres.				
Bankura	Linseed	3,800†	800	1,300	75	83	Not yet commenced	The decrease in area under rape and mustard is due to absence of rain at sowing time. The weather has been fair. The outturn is below the normal owing to exceptionally dry weather.
	Rape and mustard	4,300†	4,000	3,500	75	83	Last week of January. Normal.	
	Other oilseeds (excepting H).	10,000†	3,900	4,000	75	83	Middle of January. Normal.	
	Total	18,100	8,700	7,800	75	83		
Midnapore	Linseed	4,900	1,100	1,100		68	February. Normal.	Owing to absence of rain, the growth of the crop has been retarded. The outturn is therefore expected to be much below the normal owing to stunted growth of the crops.
	Rape and mustard	12,500	5,400	5,900	83	75		
	Other oilseeds (excepting H).	3,900	3,700	3,700		87		
	Total	21,300	10,200	10,700	83	70		
Howrah	Linseed	100†	700*	700			Middle of January. Normal.	The weather has not been favourable and the outturn is anticipated to be much below the normal.
	Rape and mustard	3,900†	3,780	3,700	87	87		
	Other oilseeds (excepting H).	400†	700	700				
	Total	4,400	5,180	5,100	87	87		
Burdwan	Linseed	200†	300	300	87	88	Beginning of February. Normal.	The weather has not been favourable. Some damage has been done by drought and the outturn is expected to be much below the normal.
	Rape and mustard	400†	700	400	87	87		
	Total	600	1,000	700	87	87		
Rajshahi	Linseed	14,800	12,900	13,100	85	87	Will begin from latter part of March. Normal.	The increase in area under rape and mustard is due to extensive cultivation of the crop this year.
	Rape and mustard	54,300	25,100	45,800	88	87		
	Other oilseeds (excepting H).	3,300	1,700	1,400	87	87		
	Total	69,400	39,700	60,300	88	87		
Dinajpur	Linseed	(40)*	(80)	(80)*	80	75		The decrease in area is due to high price of mustard. The outturn is expected to be much below the normal owing to unfavourable weather condition.
	Rape and mustard	70,000	55,700	54,000	70	87		
	Other oilseeds (excepting H).	...	100	100	80	80		
	Total	70,000	55,800	54,100	70	87		
Jalpaiguri	Rape and mustard	53,400	48,800	41,300	92	83	Middle of February. Normal.	The decrease in area was due to heavy rain at sowing time. Owing to unequal distribution of rain, the weather has not been quite favourable. The crops were damaged to a little extent by heavy rainfall at sowing time and by the continuously cloudy weather later on in parts of the district. Hence the outturn is below the normal.
	Other oilseeds (excepting H).	200	100	100	100	100		
	Total	53,600	48,900	41,400	92	83		

# SUPPLEMENT TO THE CALCUTTA GAZETTE, MAR. 5, 1922.

District.	Name of spring oilseed crops.	Estimated normal area under spring oilseeds.	Estimated area under spring oilseeds.		Taking 100 to represent the normal, what would be the average out-turn per acre cropped.		Date by which the sowing generally commenced this year and whether that date was early, normal or late.	Remarks by District Officers.
			Last year (1920-21).	This year (1921-22).	Last year.	This year.		
Dacca	Rape and mustard	7,000	1,600	1,600	21	22	Second week of January. Normal.	The weather has been fairly favourable.
	Other oilseeds (excepting oil).	300	300	300	100	100		
	Total	7,300	1,900	1,900	21	22		
Bangor	Rape and mustard	100,000	124,000	81,000	160	100	Middle of January. Normal.	The weather has been favourable and a normal outturn is likely to be obtained.
	Other oilseeds (excepting oil).	1,700	300	300	100	100		
	Total	101,700	124,300	81,300	160	100		
Bogra	Linseed	1,000	1,400	1,000	70	70	Middle of March.	Since the commencement of the first forecast, the weather has been dry and not quite favourable owing to absence of moisture. In these districts, the crops have been damaged by insects.
	Rape and mustard	60,000	14,000	14,000	75	75	Middle of January.	
	Other oilseeds (excepting oil).	—	300	300	50	50	End of December.	
	Total	61,000	15,000	15,300	74	74		
Farma	Linseed	7,000	11,400	10,100	67	67	Not yet commenced	The weather was favourable at sowing time, but defective rainfall since then has retarded the growth of and damaged about one-fourth of the crops.
	Rape and mustard	110,000	71,300	73,400	67	67		
	Other oilseeds (excepting oil).	—	300	300	67	67		
	Total	117,000	83,000	83,800	67	67		
Malda	Linseed	6,000	4,700	4,800	61	61	January and February. Normal.	The weather has not been favourable. Some damage has been caused by drought. The outturn is anticipated to be much below the normal.
	Rape and mustard	80,000	12,000	12,000	63	73		
	Other oilseeds (excepting oil).	2,500	1,900	1,100	67	56		
	Total	88,500	17,600	17,900	63	73		
Dacca	Linseed	1,300	1,500	4,800	90	90	Middle of February	The decrease in area under rape and mustard and other oilseeds was due to late submergence of flood water. Owing to continued drought, the growth of the crops has not been very good and the crops have been damaged to some extent. The outturn is therefore expected to fall much below the normal.
	Rape and mustard	60,400	70,700	71,400	80	77	January.	
	Other oilseeds (excepting oil).	1,700	1,700	100	80	51	March.	
	Total	62,400	73,900	76,300	80	77	The dates are normal.	
Mymensingh	Linseed	2,500*	2,500*	14,300	60	70	Middle of January. Normal.	The increase in area this year is due to high price of oil. The weather has been fair. The outturn is below the normal owing to want of rain.
	Rape and mustard	201,000*	204,800*	208,400	80	75		
	Other oilseeds (excepting oil).	300*	300*	1,700	30	75		
	Total	203,800*	207,600*	224,400	63	75		
Faridpur	Linseed	5,000	6,000	6,000	65	65		The weather has been fairly favourable. The outturn is expected to fall below the normal owing to want of rain.
	Rape and mustard	25,700	24,300	21,800	80	86		
	Other oilseeds (excepting oil).	1,100	1,300	1,300	61	87		
	Total	31,800	31,600	29,100	82	86		

\* Revised on the basis of settlement records.

† Including 100 acres under groundnut.



# SUPPLEMENT TO THE CALCUTTA GAZETTE, MAR. 8, 1913.

Dist.	Name of District Officer.	Notified normal area under spring oilseeds.	Estimated area under spring oilseeds.		Taking 100 to represent the normal, what would be the average output per acre cropped.		Date by which the harvesting generally commenced this year and whether that date was early, normal or late.	Remarks by District Officers.
			Last year (1910-11).	This year (1911-12).	Last year.	This year.		
Bakarganj	Linsced ...	4,300*	4,300	4,100	100	95	.....	The weather has been favourable and the growth of the crop fair. The return is expected to be a little above the normal.
	Rape and mustard ...	1,800*	1,800	2,000	100	108	February.	
	Other oilseeds (excepting oil).	100*	100	100	100	100	.....	
	Total ...	6,100	6,100	6,200	100	103		
Chittagong	Linsced ...	100†	100†	100†	100	100	March.	The weather has been favourable. The return is expected to be normal.
	Rape and mustard ...	8,800	9,000	9,000	99	100	Middle of January	
	Other oilseeds (excepting oil).	100	100	100	100	100	March.	
	Total ...	9,000	9,100	9,100	99	100	The dates are normal.	
Tippah	Linsced ...	4,300*	4,300*	4,300	67	63	Last part of January. Normal.	The increase in area as compared with last year is due to rise in price of the crops. The weather was favourable at sowing time, but has since been unfavourable owing to want of rain for the last two months and the return is expected to fall below the normal.
	Rape and mustard ...	28,000	28,000*	25,400	67	63		
	Other oilseeds (excepting oil).	600	600	600	68	67		
	Total ...	32,900	32,900	30,300	67	63		
Nagarbali	Linsced ...	8,000	7,100	7,100	100	100	Not yet begun	The weather has been favourable on the whole. Want of reasonable rain has retarded the growth of the crops to some extent. The return is expected to be normal.
	Rape and mustard ...	800	800	800				
	Other oilseeds (excepting oil).	700	800	900				
	Total ...	9,500	8,700	8,800	100	100		
Chittagong Hill Tracts.	Rape and mustard ...	12,900	11,800	12,400	80	80	Middle of January. Early.	The weather has not been favourable owing to drought which has caused some damage.
	Linsced ...	187,800*	128,800*	121,800	65	65		
Total Bengal	Rape and mustard ...	1,143,800*	881,700*	806,800	78	78		
	Other oilseeds (excepting oil).	60,000†	37,800*	37,700	74	80		
	Total ...	1,203,800*	919,500*	844,500	77	78		

\* Revised.

†

† Conventional area.

# SUPPLEMENT TO THE CALCUTTA GAZETTE, MAR. 3, 1922.

Statement showing the gauge readings at Dacca Water-works on the River Gurliganga for the week ending the 18th February 1922.

Date.	At 7 A.M.	AT HIGHEST WATER.		AT LOWEST WATER.		At 4 P.M.	REMARKS.
		Time.	Readings.	Time.	Readings.		
1922.							
12th Feb.	52.8	11-20	54.2	...	...	52.2	R. T. at 11-20.
13th "	52.6	12-15	54.3	...	...	52.8	R. T. at 12-15.
14th "	52.2	18-0	54.5	6-45	52.2	53.5	P. T. at 7-4 and R. T. at 12-15.
15th "	52.5	18-50	54.4	7-30	52.3	53.4	P. T. at 7-44 and R. T. at 12-15.
16th "	52.45	14-30	54.25	8-15	52.1	53.3	P. T. at 8-23 and R. T. at 12-15.
17th "	52.6	15-15	54.2	9-0	52.1	53.4	P. T. at 9-15 and R. T. at 12-15.
18th "	52.7	16-0	54.0	9-45	52.2	53.5	P. T. at 10-5 and R. T. at 12-15.

Notable high and low water levels of previous years.

					High.	
27th August	1906	...	...	...	70.5	
5th September	1909	...	...	...	67.86	
10th August	1910	...	...	...	69.86	
1st "	1911	...	...	...	68.46	
18th "	1912	...	...	...	67.16	
21st "	1915	...	...	...	69.7	Taken at high tide.
18th "	1916	...	...	...	68.1	
12th "	1917	...	...	...	67.1	
21st "	1918	...	...	...	69.12	
2nd "	1919	...	...	...	66.8	
8th September	1920	...	...	...	66.9	
28th July	1921	...	...	...	68.4	
					Low.	
23rd February	1907	...	...	...	51.06	
15th "	1908	...	...	...	51.06	
12th March	1912	...	...	...	51.06	
6th "	1914	...	...	...	50.60	
22nd February	1915	...	...	...	50.30	
15th "	1916	...	...	...	50.60	Taken at low tide.
6th March	1917	...	...	...	51.0	
21st February	1918	...	...	...	51.40	
24th "	1919	...	...	...	50.4	
18th "	1920	...	...	...	50.9	
19th "	1921	...	...	...	50.9	

N.B.—Zero of the gauge at Dacca Water-works = - 48.51 with reference to P. W. D. datum.

DACCA,  
The 22nd February 1922.

BENODE BEHARI ROY,  
for Executive Engineer, Dacca Division.

# SUPPLEMENT TO THE CALOUTTA GAZETTE, MAR. 8, 1922.

## Statement of weekly gauge readings on the river Ganges at Rampur Boalia for the week ending the 25th February 1922.

Date.	Hour.	Height of surface above or below zero: datum shown below.	Height of surface above mean sea-level according to P. W. D. datum.	Height of surface above mean sea-level on the same date last year according to P. W. D. datum.	Remarks.
1922.					
19th Feb.	8 A.M.	Zero of gauge is at mean sea-level.	36.55	36.26	P. W. D. datum 8.25 feet above Kidderpore old dock sill. B. M. on College step 64.95.
20th "	8 "		36.56	36.30	
21st "	8 "		36.50	36.30	
22nd "	8 "		36.50	36.30	
23rd "	8 "		36.50	36.26	
24th "	8 "		36.45	36.20	
25th "	8 "		36.45	36.15	

			Old value.	According to P. W. D. datum.
The previous year	Highest water-level	...	40.29 on 7th September 1921	60.80
Ditto	Lowest	...	33.29 on 21st April 1921	34.90
Record	Highest	...	39.25 on 26th August 1879	64.44
Do.	Ditto	...	39.08 on 9th September 1886	64.27
Do.	Ditto	...	38.80 on 26th August 1906	63.47
Do.	Ditto	...	38.21 on 26th August 1890	63.40
Do.	Lowest	...	37.63 on 26th April 1881	32.62
Do.	Ditto	...	35.13 on 14th and 15th April 1883	53.21
Do.	Ditto	...	35.02 on 21st and 22nd April 1897	64.21
Do.	Ditto	...	39.28 on 6th and 7th May 1908	64.47

N. N.—The gauge readings commenced from the 1st August 1887.

BOALIA, S. O. BHATTACHARJI,  
The 25th February 1922. for Executive Engineer, Rajshahi Division.

## Statement of weekly gauge readings on the rivers Ganges and Brahmaputra at Goalundo for the week ending the 25th February 1922.

Month and date.	Hour.	Height of surface above or below zero of gauge.	Height of surface above mean sea-level.	Height of surface above mean sea-level on same date last year.	Remarks.
1922.					
19th Feb.	7 A.M.	5.9	5.9	4.3	Zero is placed at mean sea-level. The bench-mark for the gauge is on a pucca pillar between the passenger ghat and Chandpur ghat. Its reduced level is 26.84.
20th "	7 "	5.6	5.6	4.4	
21st "	7 "	5.3	5.3	4.6	
22nd "	7 "	5.1	5.1	4.8	
23rd "	7 "	5.1	5.1	5.0	
24th "	7 "	5.1	5.1	5.3	
25th "	7 "	5.1	5.1	5.3	

The previous year	Highest water-level	...	25.8 on 27th July 1921.
Ditto	Lowest	...	4.3 on 19th February and 4th March 1921.
Record (H.F. in Brahmaputra and Ganges)	Highest	...	35.75 on 28th August 1906.
Record (average flood in Brahmaputra and Ganges)	Ditto	...	25.74 on 20th and 21st August 1892.
Record (H.F. in Brahmaputra and Ganges)	Ditto	...	25.86 on 11th to 17th and 31st August and on 1st to 3rd September 1899.
Record (H.F. in Brahmaputra only)	Ditto	...	26.66 on 31st July 1900.
Do.	Lowest	...	1.9 on 8th February 1914.
Do.	Ditto	...	2.42 on 18th March 1906.
Do.	Ditto	...	2.91 on 21st to 24th February and 8th to 9th March 1884.
Do.	Ditto	...	5.18 on 9th to 11th March 1885.
Do.	Ditto	...	5.15 on 16th, 17th and 28th to 31st March 1901.

N. N.—The gauge readings commenced from 2nd October 1900.

RAJBARI, R. C. GUHA,  
The 26th February 1922. for Subdivisional Officer, P. W. D., Faridpur.



## DISTRICT REPORTS ON WEATHER AND CROPS

For the week ending on the 1st March 1922.

**Summary.**—Excepting some scattered rain in places of Darjeeling and Cooch Behar, the weather continued dry throughout the Presidency. Harvesting of spring crops is progressing. Rain is badly needed for the cultivation of lands for jute and other autumn crops. The average price of common rice for the Province, has fallen by about 2 per cent. as compared with that of the previous week.

Serial No.	District and subdivision.	Rain fall.	PRICE OF COMMON RICE, IN SEEDS, PER RUPEE.		Character of the weather, condition of crops, etc.
			This week.	Previous week.	
1	2	3	4	5	6
1	24-PARGANAS	Inches. Nil	5½	5½	Lands are being prepared for <del>ass</del> paddy and jute. Effect of weather on the crops is good. Fodder and water are sufficient.
	Diamond Harbour.	Nil	7½	6½	
	Barrackpore	Nil	6½	(n)	
	Barnsat ...	Nil	6½	6½	
	Basirhat ...	Nil	6½	6½	
2	NADIA ...	Nil	7	6½	Harvesting of rabi crops continues. Rain is wanted for ploughing. Cattle-disease is reported from Kinsanganj and Chakdah thanas.
	Kushtia ...	Nil	6½	6½	
	Meherpur ...	Nil	7½	7½	
	Chuadanga ...	Nil	7½	7½	
	Ranaghat ...	Nil	6½	6	
3	MURSHIDABAD	Nil	7½	7½	Prospects of standing crops are fair. Fodder is sufficient. No large import and export of rice.
	Lalbagh ...	Nil	7	7	
	Jangipur ...	Nil	7½	7½	
	Kandi ...	Nil	8	8	
4	JESSORE ...	Nil	8½	8	Weather seasonable. Cultivation for jute and paddy is going on. Prospects of standing crops are not favourable for want of rain. Export of paddy is reported from Bongaon and Jhenidah subdivisions. Fodder and water are sufficient.
	Jhenidah ...	Nil	9	9	
	Magara ...	Nil	9	9	
	Narail ...	Nil	9	9	
	Bongaon ...	Nil	8½	8	
5	KHULNA ...	Nil	8	8	Rain is wanted. Scarcity of drinking water is beginning to be felt in some places.
	Satkhira ...	Nil	8	8	
	Bagerhat ...	Nil	(n)	8	

(n) Not reported.

# LEMENT TO THE CALCUTTA GAZETTE, MAR. 8, 1922.

District	Rainfall	PRICE OF COMMON RICE, IN SEANS, PER BUTRE.		Character of the weather, condition of crops, etc.
		This week.	Previous week.	
1	2	3	4	5
	Inches.			
6 BURDWAN ...	Nil	6	6	Weather warm. Rain is wanted. Threshing of winter paddy continues. Pressing of sugarcane had commenced. Standing crops are doing well.
Asansol ...	Nil	5½	5½	
Katwa ...	Nil	6½	6½	
Kalna ...	Nil	6½	6½	
7 BIRBHUM ...	Nil	6½	6½	Condition of standing crops is fair. Fodder and water are sufficient.
Rampurhat...	Nil	6½	6½	
8 BANKURA ...	Nil	7	7	Export of rice and paddy continues. Pressing of sugarcane is going on.
Vishnupur ...	Nil	7	7	
9 MIDNAPORE	Nil	7½	7½	Harvesting of rabi crops continues. Rain is wanted for ploughing. Fodder is sufficient.
Jhargram ...	(?)	7	7	
Ghatal ...	Nil	7½	(?)	
Tamluk ...	Nil	7½	7½	
Contai ...	Nil	8½	9½	
10 HOOGHLY ...	Nil	5	5	Effect of weather is favourable to the growth of crops, but rain is wanted. Fodder is sufficient. Price of rice is steady.
Serampore ...	Nil	6½	6½	
Arambagh ...	Nil	6½	6½	
11 HOWRAH ...	Nil	...	6½	Weather seasonable. Prospects of standing crops are fair.
Uluberia ...	Nil	...	7	
12 RAJSHABI (RAMPUR- BOALIA).	Nil	7	7	Prospects of standing crops are fair. Fodder and water are sufficient.
Naogaon ...	Nil	7½	7½	
Nator ...	Nil	7½	7½	
13 DINAJPUR ...	Nil	8½	7½	Harvesting of rabi crops is going on. Fodder and water are sufficient.
Thakurgaon	Nil	7	8½	
Balurghat ...	Nil	7½	7½	
14 JALPAIGURI	Nil	7	7	Prospects of rabi crops are favourable. The outturn of potatoes is fair. Harvesting of tobacco has commenced in some places.
Alipur ...	Nil	8	6	

(?) Not reported

**SUPPLEMENT TO THE CALCUTTA GAZETTE, MAR. 22.**

Serial No.	District and subdivision.	Rainfall.	PRICE OF COMMON RICE, IN SEER, PER RUPEE.		Character of the weather, condition of crops, &c.
			This week.	Previous week.	
1	2	3	4	5	6
		Inches.			
15	DARJEELING	0.78	4½	4½	The sowing of maize is in progress. Fodder and water are sufficient. Cattle-disease is reported from places.
	Kurseong ...	Nil	6½	7	
	Siliguri ...	Nil	7½	7½	
	Kalimpong...	0.35	6	(n)	
16	RANGPUR ...	Nil	8½	8	Prospects of standing crops are good. Fodder and water are sufficient. Cattle-disease is reported from Kurigram.
	Nilphamari	Nil	9	9	
	Kurigram ...	Nil	8½	8½	
	Gaibandha ...	Nil	7½	7½	
17	BOGRA ...	Nil	8½	8½	Lands are being prepared for sowing paddy and jute. Rain is necessary.
18	PABNA ...	Nil	7	7	Prospects of standing crops are fair. Rain is badly needed for the preparation of lands for sowing paddy and jute. Harvesting of mustard is finished. Pressing of sugar-cane is in progress. Fodder is sufficient.
	Sirajganj ...	Nil	7	7	
19	MALDA ...	Nil	7½	7½	Harvesting of rabi crops and transplantation of kharif paddy continue. Fodder and water are sufficient.
20	COOCH BEHAR	0.02	9½	9½	Weather reasonable. Cultivation of lands for kharif paddy and jute and cutting of tobacco leaves and gathering of mustard seeds continue. Fodder and water are sufficient.
21	DACCA ...	Nil	6½	6½	Weather is hot at day and cool at night. Harvesting of rabi crops is in progress. Condition of standing crops is not satisfactory for want of rain. Rice market is steady.
	Manikganj...	Nil	8	8	
	Narayanganj	(n)	8	7½	
	Munshiganj (a)	Nil	(n)	7½	
22	MYMENSINGH	Nil	7½	7½	Weather cool and dry. Harvesting of rabi crops is nearly finished. Preparation of soil for jute and paddy continues. Rain is badly needed. Prospects of the standing crop are fair. Fodder and water are available. No cattle-disease is reported.
	Jamalpur ...	Nil	8	8	
	Tangail ...	Nil	7½	8½	
	Netrakona ...	Nil	8	7½	
	Kishorganj...	Nil	8	8	

(a) Munshiganj being very near to Dacca and Narayanganj, its rainfall statistics are not quoted. To give information regarding the northern part of the district, rainfall figures for Kapesia thana are reported here.  
(n) Not reported.

**SUPPLEMENT TO THE CALCUTTA GAZETTE, MAR. 8, 1922.**

District and subdivision	Rainfall	PRICE OF COMMON RICE, IN SEER, PER RUPEE.		Character of the weather, condition of crops, etc.
		This week	Previous week.	
	Inches.			
23 FARIDPUR ...	Nil	{ 8 7 }	{ 8 7 }	State and prospects of standing crops are favourable. Fodder is sufficient. Cultivation of lands for jute and paddy is continuing. Rain is wanted.
Goalundo ... (Rajbari).	Nil	7½	7½	
Madaripur ...	Nil	9	8	
Gopalganj(a)	Nil	(n)	9	
24 BAKARGANJ (BARISAL).	Nil	8½	8½	Weather reasonable. Prospects of standing crops are fair. Fodder and water are sufficient.
Pirojpur ...	Nil	8½	8½	
Patuakhali ...	Nil	8	8	
Dakshin Sha-bazpur (Bhola).	Nil	7½	7½	
25 CHITTAGONG	Nil	{ 7½ 6½ }	{ 7½ 6½ }	Cultivation of rabi crops is completed. Prospects of standing crops are fair. Fodder is sufficient. Pongol salt is selling at 10 and 9½ seers per rupee at Salar and Cox's Bazar, respectively.
Cox's Bazar	Nil	8	7	
26 TIPPERA ... (COMILLA).	Nil	7½	7½	Prospects of rabi crops are unsatisfactory; rain is badly needed.
Brahmanbaria.	Nil	7½	6½	
Chandpur ...	Nil	8	8	
27 NOAKHALI ...	Nil	7½	7½	Weather reasonable. Rain is badly needed. Fodder and water are sufficient.
Feni ...	Nil	8½	8½	
28 CHITTAGONG HILL TRACTS.	Nil	(n)	(n)	Condition of rabi crops is unfavourable.
29. TRIPURA STATE.	Nil	7	7½	Weather reasonable. Jute is selling at Rs. 6 per maund and cleaned cotton at Rs. 18 to Rs. 35. Fodder and water are sufficient. Cattle-disease is reported from two divisions. Harvesting of rabi crops and transplantation of boro rice are nearly finished. Clearing of foam has begun.

(a) Burma rice.

(a) The rainfall at Haridaspur which is very near to Gopalganj is shown here.

(n) Not reported.

Dacca, the 4th March 1922.

J. C. ROY,  
for Director of Agriculture, Bengal.

**SUPPLEMENT TO THE CALCUTTA GAZETTE, MAH.**

**List of prices of articles of food at Calcutta during the week ending  
Saturday, the 4th March 1922.**

Names of articles.	WHOLESALE PRICE PER MAUND.			RETAIL PRICE PER SEER.			
	From—			From—		To—	
Rice—	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Balam, coarse ...	5 12 0	6 4 0	0 2 6	0 2 9	0 2 9	0 2 9	
" medium ...	6 12 0	7 8 0	0 2 9	0 2 9	0 3 0	0 3 0	
Patnai coarse ...	6 0 0	.....	0 2 6	0 2 9	0 2 9	0 2 9	
" medium ...	6 10 0	6 12 0	0 2 9	0 3 0	0 3 0	0 3 0	
Nagra, coarse ...	7 6 0	.....	0 3 0	.....	.....	.....	
" medium ...	7 10 0	.....	0 3 3	.....	.....	.....	
Dudhkaima ...	7 4 0	.....	0 3 3	.....	.....	.....	
Rangoon Boiled	.....	.....	0 2 6	.....	.....	.....	
Kajla ...	.....	.....	0 2 3	.....	.....	.....	
Wheat, Dudhia ...	9 10 0	.....	.....	.....	.....	.....	
" Jamali ...	7 12 0	.....	.....	.....	.....	.....	
Gram, Patnai (whole)	8 12 0	.....	0 4 0	.....	.....	.....	
" dal ...	11 4 0	11 8 0	0 5 0	.....	.....	.....	
Mung " (Hari) ...	7 8 0	7 12 0	0 4 0	0 5 0	0 5 0	0 5 0	
" " (Krishna) ...	7 0 0	.....	0 5 0	.....	.....	.....	
Arhar " ...	8 0 0	11 0 0	0 3 0	0 4 0	0 4 0	0 4 0	
Masur " (split) ...	5 0 0	.....	0 2 6	0 2 9	0 2 9	0 2 9	
" " (Khanri) ...	8 8 0	.....	0 4 0	.....	.....	.....	
Kalai " ...	6 8 0	6 12 0	0 3 0	.....	.....	.....	
Salt ...	2 5 6	2 7 0	0 1 3	0 1 6	0 1 6	0 1 6	
Sugar (Brown Java)	13 0 0	13 8 0	0 6 6	0 7 0	0 7 0	0 7 0	
Gur, Bheli ...	.....	.....	0 5 0	.....	.....	.....	
" Bhursat ...	.....	.....	0 4 0	.....	.....	.....	
Milk ...	7 8 0	9 0 0	0 6 0	.....	.....	.....	
Mustard Oil ...	22 0 0	24 0 0	0 11 0	0 13 0	0 13 0	0 13 0	
Flour (Country) ...	9 4 0	.....	0 4 6	0 5 0	0 5 0	0 5 0	
Atta No. 3 ...	7 0 0	.....	0 3 6	0 4 6	0 4 6	0 4 6	
" " 2½ ...	7 6 0	.....	0 3 6	.....	.....	.....	
" " B ...	9 14 0	.....	0 5 0	.....	.....	.....	
Suji ...	10 8 0	.....	0 5 0	.....	.....	.....	
Ghee (Bhadwa, Matki, etc.)	84 0 0	.....	1 15 0	2 4 0	2 4 0	2 4 0	
" [Patiram, Khurja, Ruto,	77 0 0	.....	.....	.....	.....	.....	
Etwa (better kind), etc.]	60 0 0	62 0 0	.....	.....	.....	.....	
" (Lalli, Etwa, Sagar, etc.)	4 8 0	.....	.....	.....	.....	.....	
Maize ...	3 0 0	4 0 0	0 2 0	0 2 6	0 2 6	0 2 6	
Potatoes ...	.....	.....	0 1 6	0 2 0	0 2 0	0 2 0	
Brinjal ...	4 12 0	5 0 0	0 2 0	0 2 6	0 2 6	0 2 6	
Onion ...	15 0 0	18 0 0	0 12 0	.....	.....	.....	
Fish, Rabu ...	.....	.....	1 0 0	1 4 0	1 4 0	1 4 0	
Mutton (2nd class) ...	.....	.....	0 5 0	0 8 0	0 8 0	0 8 0	
Beef (2nd and 3rd classes)	.....	.....	.....	.....	.....	.....	

N.B.—This is an abstract for price of the following markets :—

Wholesale.—Chella Hat, Ramkrishnapur Hat, Sealdah Fish and Milk Markets and Poets Bazar.

Retail.—Sir Stuart Hogg Market, Orphananj Market, Sova Bazar, Nuton Bazar, Raja Babu's Bazar, Karaya Bazar, Taltola Bazar, Mullick Bazar and Jogu Babu's Bazar.

**H. L. MUKHARJI,**

for Commissioner, Presidency Division.

CALCUTTA, the 4th March 1922.



**CALCUTTA IMPROVEMENT TRUST.**

**Notice under Section 43 of Bengal Act V of 1911.**

**Scheme No. XXII—Nebutola Lane Widening.**

*(St. James Square to Bowbazar Street).*

The Board of Trustees for the Improvement of Calcutta hereby give notice that a Street Scheme, viz., Scheme No. XXII (Nebutola Lane Widening; St. James Square to Bowbazar Street) has been framed for the area bounded as follows:—

*On the North*—From a point on Bowbazar Street at the north-western corner of premises No. 119, Bowbazar Street running eastwards along the southern edge of Bowbazar Street to a point on the southern edge of Bowbazar Street about 50 feet from the north-eastern corner of premises Nos. 124 and 124-1, Bowbazar Street.

*On the East*—From this point southwards in a line with the eastern edge of St. James Square to the south-western corner of 8, St. James Square.

*On the South*—From this point westwards along the northern edge of St. James Square South and then across Nebutola Lane along the northern edge of Hidaram Banerjee Lane to the south-western corner of premises No. 41-1, Hidaram Banerjee Lane.

*On the West*—From this point northwards in a straight line to a point on the north-western corner of premises No. 119, Bowbazar Street whence at first started.

Particulars of the scheme, a map of the area comprised in the scheme and a statement of the land which it is proposed to acquire may be inspected at the office of the Trust 5, Olive Street, on week days between the hours of 11 A.M. and 4 P.M. and on Saturdays between 11 A.M. and 2 P.M.

Copies of the above documents will be delivered to the applicants on payment of the following fees:—

	Rs.	A.	P.
Particulars of the Scheme	...	0	4 0
Map of the area	...	1	0 0
Statement of land which it is proposed to acquire	...	0	4 0

Objections to the Scheme will be received upto May 15th 1922.

C. H. BOMPAS *Chairman.*

CALCUTTA,

*The 3rd February 1922.*

GOVERNMENT OF BENGAL, IRRIGATION DEPARTMENT.

*Approximate return of traffic on the Circular and Eastern Canals for the week ending Saturday, the 25th February 1922, as compared with the corresponding week of the previous year.*

Nature of cargo.	WEEK ENDING SATURDAY, THE 24TH FEBRUARY 1922.			WEEK ENDING SATURDAY, THE 24TH FEBRUARY 1921.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
		Mds.	Rs.		Mds.	Rs.
Rice and paddy ...	777	256,298	4,466	1,042	211,914	5,634
Jute ...	41	17,124 <sup>o</sup>	260	103	43,528 <sup>+</sup>	496
Firewood ...	72	45,925	683	82	60,300	875
Other articles ...	846	252,371	2,968	953	263,087	3,134
Total ...	1,736	571,718	8,377	2,180	579,129	9,139
Empty boats and rafts ...	667	...	2,285	511	...	2,154
GRAND TOTAL ...	2,403	571,718	10,662	2,691	579,129	10,293

Mds.  
\* Weight by canal measurement ... 18,800  
† Ditto ditto ... 52,712<sup>1</sup>

T. C. BHATTACHARJI,  
*Assistant Secretary to the Government of Bengal.*

CALCUTTA,  
The 4th March 1922.



# The Calcutta Gazette

WEDNESDAY, MARCH 15, 1922.

## SUPPLEMENT.

### OFFICIAL PAPERS.

[Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of five rupees per annum if delivered in Calcutta, or seven rupees and eight annas if sent by post.]

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## RE-ORGANISATION OF THE SERVICES BELOW THE BENGAL EDUCATIONAL SERVICE.

### GOVERNMENT OF BENGAL.

#### EDUCATION DEPARTMENT.

##### Education.

CALCUTTA. THE 3RD MARCH 1922.

RESOLUTION—No. 464Edn.

#### READ—

- (1) The report of the Committee appointed to consider the question of the re-organisation of the Educational services below the Bengal Educational Service.
- (2) A letter No. 687, dated the 6th September 1920, from the Director of Public Instruction, Bengal, on the subject of strengthening the district inspectorate.

Government Resolution No. 872T.-Edu., dated the 9th October 1920,

Mr. W. Wordsworth, Principal, Presidency College	...	President.
Mr. J. W. Gunn, Officiating Director of Public Instruction	...	
The Hon'ble Babu Kishori Mohan Chatterjee	...	
The Hon'ble Khan Sahib Aman Ali	...	Members.
Babu Heramba Chandra Maitra, Principal, City College	...	
Babu Kausik Nath Bhattacharji, Lecturer, Rajabai College	...	
Raj Surendra Nath Sinha Bahadur, Officiating Assistant Director of Public Instruction	...	Member and Secretary.

a Committee, consisting of members noted in the margin, was appointed to examine and report upon the present pay and prospects of officers of the Education Department below the Provincial Educational Service (now called the Bengal Educational Service) and to recommend such changes

of organisation as they considered desirable, with special reference to the question whether the present graded system should be retained or whether a time-scale of pay should be introduced.

2. The Committee recommended the introduction of time-scale-pay in place of the present graded system and suggested various rates of pay, and for this purpose they divided the officers concerned into these four categories according to the nature of their work :—

- |                 |                    |
|-----------------|--------------------|
| I. Teaching.    | III. Ministerial.  |
| II. Inspecting. | IV. Miscellaneous. |

In coming to the conclusions contained in this resolution the Government of Bengal (Ministry of Education) have generally followed these recommendations.

3. The present resolution covers the officers included in categories I and II. The cases of officers included in categories III and IV are being considered separately, and orders will, it is hoped, be issued shortly. The Government of Bengal (Ministry of Education) recognise that the decision to deal first with the officers in categories I and II will cause disappointment among officers of the third and fourth categories, but feel that the comparatively small number of officers concerned and the relief already given to the latter in the shape of *ad-interim* allowances justify the prior consideration of the case of teachers and inspecting officers who do not receive such relief.

4. The question of strengthening the district inspectorate has long been under the consideration of the Local Government. Proposals were submitted to the Government of India in 1918, but were held up for lack of funds. The Government of Bengal (Ministry of Education) have decided to take this opportunity of effecting a long-desired change. Each district will henceforth be under the charge of a District Inspector who will be a member of the Bengal Educational Service, and the present arrangements according to which certain District Deputy Inspectors hold special charge of subdivisions will cease. Each of the 14 Assistant Inspectors (excluding the Special Assistant Inspectors for Muhammadan Education), who are already members of the Bengal Educational Service, will be placed in charge of a district. Fourteen of the existing 28 District Deputy Inspectors of Schools will be promoted to the Bengal Educational Service and be placed in charge of the remaining 14 districts. These 28 officers will in future be designated District Inspectors. They will generally carry out all duties now performed by District Deputy Inspectors, *e.g.*, will supervise primary education in the districts, advise and assist the District Boards, and also such other duties as may be required of them by the Divisional Inspectors or the Director of Public Instruction.

5. The charge of subdivisions will be entrusted to Subdivisional Inspectors. There will be 61 such officers for the present, including 14 of the present District Deputy Inspectors.

6. The Government of Bengal (Ministry of Education) are now pleased to issue the following orders :—

- (a) The 28 districts will each be placed under the supervision of a District Inspector. These will be (i) 14 Assistant Inspectors of Schools (excluding those for Muhammadan Education) who are already in the Bengal Educational Service, (ii) 14 of the existing District Deputy Inspectors of Schools, who will be promoted to the Bengal Educational Service.
- (b) Subdivisions will be placed under the supervision of Subdivisional Inspectors subordinate to District Inspectors. There will be 61 such officers on the scale of pay Rs. 150—10—250.
- (c) Fifty-four officers engaged in teaching work, viz., assistant head masters and assistant head mistresses of high and normal schools, senior grade Laboratory Assistants in colleges, etc., will be placed on the scale of Rs. 150—10—250.
- (d) Twenty-one Lecturers and Demonstrators will be promoted to the Bengal Educational Service.
- (e) Seventy-nine Lecturers and Demonstrators will be placed in a separate Lecturer's service on the scale Rs. 150—10—300 (efficiency bar)—10—400, with a selection grade of three officers on Rs. 450.
- (f) Seven hundred and seventy-three officers (viz., 505 English teachers of high schools, etc., and 268 Sub-Inspectors of Schools, will be placed on the scale Rs. 75—5—150 (efficiency bar)—5—200.
- (g) One hundred and twenty-three senior classical teachers of high schools, etc., will be placed on the scale Rs. 60—4—120 (efficiency bar)—4—160.
- (h) Three hundred junior classical teachers of high schools, etc., will be placed on the scale Rs. 50—2—80 (efficiency bar)—3—110.
- (i) Six hundred and one officers (viz., 574 vernacular teachers, etc., and 27 Assistant Sub-Inspectors and Inspecting Maulvis) will be placed on the scale Rs. 35—2—75 (efficiency bar)—3—90.
- (j) Six senior maulvis of the senior section of the Calcutta Madrasah will be placed on the scale Rs. 100—10—200 (efficiency bar)—10—250.
- (k) Four mistresses in Training Institutions for Indian girls will be placed on the scale Rs. 100—10—150.

(1) Against the 2,036 posts created as detailed above the following existing 2,036 posts are abolished from the cadres of the services named :—

(i) Subordinate Educational Service 1,125—

Class	I	...	17
"	II	...	38
"	III	...	73
"	IV	...	107
"	V	...	163
"	VI	...	169
"	VII	...	206
"	VIII	...	352
Total		...	1,125



Lower Subordinate Educational Service 178—

Class	I	...	5
"	II	...	23
"	III	...	13
"	IV	...	37
"	V	...	80
Total		...	178

(iii) Vernacular Teachers' Service (30—1—50) 316.

(iv) Outside the graded service 417—

	150—10—250	...	1
	100—10—250	...	2
	200	...	1
	180	...	1
(Temporary)	125	...	2
	100	...	4
	75—5—100	...	1
	75	...	1
	70—2—90	...	1
	60—3—90	...	1
	60	...	1
(Temporary)	60	...	1
	50—1—70	...	1
(Temporary)	50—2—60	...	1
	50	...	19
	45—3—60	...	1
	45	...	3
	40	...	7
	35	...	2
	30—1—50	...	17
	30	...	31
	25—1—35	...	1
	25	...	14
	20	...	10
	18	...	76
	16	...	12
	15	...	16
	12	...	14
	10	...	91
	8	...	60
	7	...	1
	6	...	22
	4	...	1
Total		...	417

(m) the re-organisation will take effect from 1st September 1921.

(n) the concession of duty allowances granted to Assistant Head Masters and Assistant Head Mistresses of High Schools and Normal Schools and heads of Middle Schools (including the Junior Madrasah at Rajshahi) will be entirely withdrawn from that date.

7. Officers will be brought on to these scales in accordance with the following principles :—

- (i) Officers promoted to the 35 posts now created in the Bengal Educational Service, will draw the pay of the stage next above their present pay. Officers whose present pay is less than the minimum of the Bengal Educational Service will draw that minimum.
- (ii) Other officers will draw the pay at a stage of the new scale applicable to them next above the stage that is nearest to one and one-third times their present pay, or if two stages are equidistant next above the higher stage subject to the condition that no officer shall draw less than the minimum of the scale in which he is placed or more than the maximum. An officer whose present pay exceeds the maximum of the scale in which he is placed will draw that maximum and a personal allowance equal to the excess.

## Example:—

An officer going into the scale of Rs. 75—5—150—5—200.

If his present pay is Rs. 50 will draw Rs. 75.

Ditto is „ 100 „ „ 140.

Ditto is „ 125 „ „ 170

Ditto is „ 250 „ „ 200 has a personal allowance of Rs 50.

Present pay is for this purpose defined as the rate of pay drawn for 31st August 1921, or in the case of officers on long leave or deputation on 1st September 1921 the pay of their substantive posts on 31st August 1921. No officer will be required to refund any sum which for the period between 1st September 1921 and the end of February 1922 he has drawn correctly under the existing rules as acting allowances.

(iii) The holders of former temporary posts which by this resolution now become permanent posts will be treated in the same way as the holders of permanent posts and in particular the pay of the temporary posts will be the substantive pay for the purpose mentioned in the latter part of paragraph 7 (ii).

(iv) Any officer appointed on or subsequent to 1st September 1921 will draw the minimum of the scale in which he is placed if he was appointed on a pay not exceeding the minimum of the scale; otherwise the stage of the time-scale next above the rate of pay on which he was appointed.

8. The Government of Bengal (Ministry of Education) are pleased to authorise the Director of Public Instruction to publish nominal rolls showing the names of the posts and the holders of them falling into the various classes above. Local officers will then draw bills according to the principles of this resolution and Treasury Officers have been instructed to meet such bills. Local officers will attach to the bills submitted for payment a statement showing the rate of pay drawn by each man for the 31st August 1921 and the rates of pay claimed for every succeeding month. Only the officer empowered to make an appointment may enable the holder of this appointment to pass beyond the efficiency bar, but all drawing officers may pass provisional orders in such cases and the Treasury Officer will pass the bills. Such provisional orders must be submitted to the appointing authority for confirmation and such confirmatory orders received should be attached to future bills.

9. The Government of Bengal (Ministry of Education) desire to express their thanks to Mr. Wordsworth and the other members of the Committee for the successful manner in which they have dealt with so complex a matter.

ORDER.—Ordered that the Resolution be communicated (1) to the Finance Department of this Government, for information and communication to the Accountant-General, Bengal; (2) to the Director of Public Instruction, Bengal, for information and necessary action.

Ordered also that the Resolution be published in the *Calcutta Gazette* for general information.

By order of the Government of Bengal,

(Ministry of Education).

S. W. GOODE,

Secretary to the Government of Bengal (offg.).

## NOTIFICATION.

Minister in charge: The Hon'ble Sir S. N. Banerji, Kt.

No. 1261M.—The 8th March 1922.—The following is published for general information, under section 41 of the Licensed Warehouse and Fire-Brigade Act, 1893 (Bengal Act I of 1893).

S. W. GOODE,

Secretary to the Government of Bengal (offg.).

No. S. 4689, dated Calcutta, the 13th February 1922.

From—J. N. GUPTA, Esq., M.B.E., I.C.S., Chairman of the Corporation of Calcutta,

To—The Secretary to the Government of Bengal, Local Self-Government Department.

I have the honour to submit the following report under section 41 of Act I (B.C.) of 1893, for the year 1920-21, in accordance with the instructions contained in Government order No. 387T.M., dated the 27th May 1910.

2. During the year under report the fees under sections 10 and 24 of the said Act were levied at 10 per cent. on the annual valuation of warehouses, as in the preceding year.

3. A statement showing the receipts and disbursements of the Licensed Warehouse Fund and a list of jute and other licensed warehouses for the year 1920-21 in a consecutive form, as desired in Government order No. 469M., dated the 14th February 1917, are appended.

## Licensed Warehouse (Fire Brigade) Fund.

## Statement of Receipts and Disbursements during the year 1920-21.

Particulars.	DEMAND.			COLLECTIONS.			REMISSION.			BALANCE.		
	Arrear.	Current.	Total.	Arrear.	Current.	Total.	Arrear.	Current.	Total.	Arrear.	Current.	Total.
(a) License fees levied under sections 10 and 24.	Rs.	Rs. A.	Rs. A.	Rs.	Rs. A.	Rs. A.	Rs.	Rs. A.	Rs. A.	Rs.	Rs. A.	Rs. A.
...	1,03,714 5		1,03,714 5	...	1,00,854 8	1,00,854 8	...	2,144 8	2,144 8	...	730 8	730 8
(b) Supplementary demand for 1919-20 created after 31st March 1920.	Rs.		Rs. 0 35	...	...	...	...	...	...	...	...	...
(c) Mutation fees levied under section 11.	...	...	...	...	60 0	60 0	...	...	...	...	...	...
(d) Rates levied under section 25 (1) (a).	...	...	...	...	...	...	...	...	...	...	...	...
(e) Rates levied under section 25 (1) (b).	...	...	...	...	...	...	...	...	...	...	...	...
(f) Rates levied under section 25 (1) (c).	...	...	...	...	...	...	...	...	...	...	...	...
(g) Fines and Penalties under the Act.	...	...	...	...	1,583 0	1,583 0	...	...	...	...	...	...
(h) Contribution from Government towards the cost of establishment.	...	...	...	...	3,000 0	3,000 0	...	...	...	...	...	...
(i) Contribution from the General Fund.	...	...	...	...	1,41,364 0	1,41,364 0	...	...	...	...	...	...

		Rs.	A.
Total Receipts	...	2,46,854	8
Less—Refund	...	...	...
Net receipts	...	2,46,854	8
Add—Opening balance	...	30 0	8
Total	...	2,46,884	6

## Disbursements.

		Rs.
(1) Establishment	...	3,000
(2) Contribution to Fire Brigade	...	2,73,857
(3) Any other special item specified	...	...
Total	...	2,76,857

Closing balance on 31st March 1921 ... Nil

## List of Jute Warehouses, 1920-21.

Name of Street.	Street or holding number, with the number of warehouses shown in brackets when more than one.
<b>Ward No. 1.</b>	
Bagbazar Street	... 1.
Canal West Road	... 37-1, 37-1-1A, 37-1, 39-2, 39-2-1, 39-3, 39-4, 46.
Chitpore Bridge Approach	... 1.
Chitpore Road, Upper	... 178, 201, 202, 204, 206, P.1(2), P.5(2), P.5.
Ram Krishna Lane	... 21.
Durga Ch. Mukherji Street	... 1, 1-1, 6 to 6-6(7), 12, 14, 32, 33, 41, 42, 43, 45.
Gopal Chandra Neogi Lane	... 1, 4, 20.
Galiff Street	... 10-1, 22, 22-4, 25-1, 26.
Shambazar Bridge Road	... 5.
Ultadungi Road	... 47.

<b>Ward No. 2.</b>	
Ahiritola Street	... 1, 3, 4, 4-1-3(3), 5, 6, 8, 10-3, 169, 170, 172.
Beniatola Street	... 1, 6.
Banamali Sarkar Street	... 10.
Ramdhan Khan Lane	... 4-1, 5.
Bipradas De Lane	... 1, 1-2, 2, 3.
Chitpore Road, Upper	... 243, 244.
Duttapara Lane	... 11, 12, 23, 24, 25.
Darmabatta Street	... 75, 77, 77-1, 77-2, 77-5, 80, 80-1, 81, 85-1, 86, 87, 88, 92, 93, 99, 100, 103, 108, 121, 121, 125, 133, 134, 135, 136 to 136(9), 140-1 to 140-5(5), 138, 139, 140-8, 140-9, 140-10, 140-11, 140-12, 140-14, 140, 141, 142, 143-2, 143-4, 143-5, 82, 114, 112, 117, 91.
Darmabatta, 1st Lane	... 1, 2, 3C, 4, 5, 6.
Galiff Street	... 1-1.
Hara Ch. Mullick Lane	... 1, 16, 23, 24.
Mahammed Romjan Lane	... 14.
Madamoban Dutt Lane	... 3.
Hara Ch. Mullick Street	... 2, 4, 5, 6, 7, 7-1, 9, 10, 11, 12, 13, 13-4, 13-6, 16, 19, 20, 22, 23, 24-1, 25, 27, 28.
Joy Mitra Ghat Street	... 2-1.
Munick Bose Ghat Street	... 1, 1-1, 3, 17-1, 33, 40, 43, 44, 44-1, 46, 47, 48, 50, 49, 36, 36-1, 36-7, 36-9, 20-1, 44-3, 44-2, 44-4.
Nimtolla Ghat Street	... 68, 82.
Nimtolla Ghat Lane	... 15.
Nayan Sur Lane	... 1A, 1-1, 1-2, 5, 7, 8, 9.
Natherbagan Street	... 11(2), 11-1(2), 22-1, 22-3, 25-1, 25.
Sovabazar Street	... 2, 8, 12, 16, 10, 20, 32, 9, 36, 38, 48, 46A, 50A, 54, 64, 43, 41, 39, 29, 19, 7A, 11, 5, 1(2), 15, 33.
Strand Road	... 66, 67-7(3).

<b>Ward No. 3.</b>	
Badridas Temple Street	... 1, 2, 2-9, 4, 24.
Canal West Road	... 24-1, 25-3, 26-H-1, 29, 29-1, 30, 35, 35-5, 24-2, 23, 31, 32, 33, 35-4-1.
Gouribere Lane	... 55, 56, 57, 51.
Halsibagan Road	... 4.

STATEMENT TO THE CALCUTTA GAZETTE, MAR. 15, 1922.

Name of Street	Street or holding number, with the number of warehouses shown in brackets when more than one.
<b>Ward No. 5.</b>	
Strand Road	... Block 1 to 10 (10) and 12 to 17 (6), 58, 192.
Jagannath Ghat	... Port Commissioners' Inland Warehouse.
<b>Ward No. 9.</b>	
Beliaghata Road	... 135.
Circular Road, Upper	... 303.
<b>Ward No. 19.</b>	
Convent Lane	... 12.
<b>Ward No. 25.</b>	
Garden Reach Road	... 9.

**List of Warehouses other than Jute, 1920-21.**

<b>Ward No. 1.</b>	
Bagbazar Street	... 74, 76-1.
Bosepara Lane	... 49-1.
Bhabanath Sen Street	... 2 (3).
Circular Road, Upper	... 228-2-H.
Grey Street	... 112, 117, 118.
Canal West Road	... 39 (2), 40, 43 (6), 43-H-2, 43-H-3, 42(4), 43-H-4, 46 (2), 46-1.
Chitpore Road, Upper	... 161-H-18, 176-H-9, 176-H-10, 199-1, 199-1-1 (3), 199-1-2 (2), 199-6, 199-1-7, 199-18 (2).
Raja Dinendra Street	... 153.
Cornwallis Street	... 81, 82-2, 83, 116, 124 (2), 136-1, 137, 138 (2), 138-1.
Pal Lane	... 6.
Kaliprosad Street.	Chakraborty 12-3.
Galiff Street	... 18 (5), 18-2, 21-H-1, 22-H-1 (8), 22-H-3, 22-H-4, 25.
Nanda Kissoore Street	... 1 (4), 2 (2), 3 (7).
Mohanlal Street	... 22.
Raja Naba Kissen Street	... 79 (4).
Jadufath Mitra Lane	... 15.
Rasicklal Mitra Lane	... 11.
Shambazar Bridge Road	... 6, 22.
<b>Ward No. 2.</b>	
Abiritolla Street	... 122, 133.
Baloram Mazumdar Street	... 35.
Beniatolla Street	... 17, 19, 103.
Bonomali Sircar Street	... 1-H-15.
Nandaram Sen Street	... 42.
Chitpore Road, Upper	... 216, 217, 220, 230, 262, 260 (2), 316, 331, 332.
Brindaban Basak Street	... 26.
Duttapara Lane	... 5.
Darabhatta Street	... 71 (4), 71-1 (2), 72 (8), 180 (4).
Kasi Mitra Ghat Street	... 31, 32 (2), 33.
Madan Mohan Dutta Lane	... 5, 6 (5).
Nimtolla Ghat Street	... 71-1, 80, 82, 56-1(3).
Mahammed Romjan Lane	... 4, 6(4), 11(16), 17(2), 22-1(3).
Natherbagan Street	... 13-2.
Sovabazar Street	... 98, 100, 101(2), 103, 110, 122, 126.
Strand Road	... 67-10(3), 67-11, 67-H-18.



Name of Street.

Street or holding number, with the number of  
warehouses shown in brackets  
when more than one.

## Ward No. 3.

Beadon Street	... 81.
Brindaban Bose Lane	... 30.
Chitpore Road, Upper	... 149.
Cornwallis Street	... 76-1, 148.
Circular Road, Upper	... 254, 146.
Manicktolla Road	... 114-H-1.
Masjidbari Street	... 167-H-9.
Grey Street	... 26-1(2), 8.
Raja Dinendra Street	... 2(2).
Pearimohan Sur Lane	... 9-3.
Ultadingi Road	... 2.
Durga Ch. Mitra Street	... 21.
Canal West Road	... 21.
Raja Raj Krishna Street	... 19.

## Ward No. 4.

Bahir Mirzapore Road	... 1.
Bepradas Lane	... 1, 17.
Circular Road, Upper	... 120, 121, 258, 258-15-2, 995, 289(2), 296.
Canal West Road	... 15-H-1(2), 15-H-2, 16-H-6, 16-H-17, 16-H, 17-H-8, 17-H-9, 17-H, 17(2), 17-H-30(2), 17-H-35(2), 17-H-36, 18-H-6, 18-H-2, 18-H-3(4), 18-1(2), 18-3, 18-H-4, 19(6), 19-H-41, 19-9, 19-1, 19-H.
Gas Street	... 3-H-3, 4-1, 5-1, 5-3-H-1, 5-H-2.
Garpar Road	... 95.
Machubazar Street	... 67, 68.
Nanda Kumar Chaudhuri 2nd Lane	... 19, 24.
Rajendralala Street	... 2.

## Ward No. 5.

Basak Street	... 2.
Brajagobinda Shaha Lane	... 1.
Darpananayan Tagore Street	... 17, 28.
Bartolla Street	... 35, 82(2).
Chaitan Ch. Sen Lane	... 2.
Banastolla Street	... 2(3), 60, 66(5).
Dayahatta Street	... 3, 8.
Jaganmohan Mullick Lane	... 8-1.
Chitpore Road, Upper	... 357, 391, 402(7).
Cotton Street	... 115(3), 117, 117-1, 119(3), 125(2), 130, 131, 132(2), 133(3), 134, 125, 138.
Kalakar Street	... 9-1.
Darmahatta Street	... 20(4), 21(11), 23-1, 27, 28, 34(4), 36-1(2), 37, 38(6), 41, 41-2, 41-3, 50, 52, 61, 62, 63(2), 65(13), 65-1(31), 66, 67, 68(2), 182, 183, 184, 185, 186, 187(12), 188, 192, 195, 202, 202-10, 202-11, 202-12.
Jorabagan Street	... 2(5), 5, 7-1, 19, 25, 28.
Karforma Lane	... 15.
Kalakar Lane	... 2(3).
Mandal Street	... 18-4, 43.
Moyrahatta Street	... 31, 34.
Nimtolla Ghat Street	... 5-1(6), 14, 14-2, 40.
Moydaputty Lane	... 2(2), 3(2), 3-1(5), 3-2(5), 5, 6.
Raghunandan Lane	... 9-1(2).
Ramlal Sett Boud	... 1, 2, 3(2).
Sovaram Basak Street	... 1(2), 8, 10, 14-3-1.

Name of Street.	Street or holding number, with the number of warehouses shown in brackets when more than one.
Shama Bai Lane	... 2, 6, 8.
Ganguli Lane	... 3-1.
Pathuriaghata Street	... 3, 80-1.
Strand Road	... 62(5), 62-1, 67-16-P34, 67-16-P29, 67-18-P28(3), 67-19-P29, 67-19-P30, 67-19-P31, 67-20-P32, 67-21-P32, 67-21-P33(3), 67-P31, 67-P35, 67-23-P36 and 37, 67-24-P38, 67-P40 and 42, 67-P54, 67-P39, 67-P56, 67-39, 48, 67-40P and 56, 165P.

**Ward No. 6.**

Beardon Street	... 16-2A.
Baranoshi Ghose Street	... 14.
Chitpore Road, Upper	... 7, 56.
Machhabazar Street	... 159(3), 166-B, 135.
Mitra Lane	... 19.
Srinath Roy Lane	... 7, 8.
Pitambar Sen Lane	... 6.

**Ward No. 7.**

Armenian Street	... 7.
Bonfield Lane	... 13, 14.
Cross Street	... 94 (6).
Canning Street	... 48, 55, 58, 56 (3), 60 (5), 62, 63, 65 (2), 66 (2), 69-1, 95 (2).
Clive Street	... 29, 40 (3), 41B, 42 (2), 42-1-1 (4), 42-1 (2), 42-3 (7), 46, 62, 70-2, 70-4, 70-7, 71-2, 72-1 (3), 73 (2), 73-3, 79, 82.
Clive Ghut Street	... 4.
David Joseph Lane	... 6 (2), 16 (3), 16-1, 18.
Jackson Lane	... 6, 12, 18, 20.
Old Court House Corner	... 8 (3).
Old Court House Lane	... 4 (2), 5 (2).
Cotton Street	... 67, 68 (2), 69, 70, 71 (3), 72 (3), 73 (3), 75 (3), 76, 77 (3).
Radhabazar Street	... 19.
Lyons Range	... 2 (2).
Pollock Street	... 1-1, 14, 24 (2), 28.
Radhabazar Lane	... 11-1.
Ramsebak Mullick Lane	... 27.
Strand Road	... 42 (2), 7-P-66, P. 165 (2).
Sukca Lane	... 4, 5, 11, 11-1, 13, 16 (2), 19 (2), 20.

**Ward No. 8.**

Bowbazar Street	... 225, 236 (2), 242, 245, 263, 269, 296, 307, 309.
Blackburn Lane	... 33.
Phear Lane	... 33 (3).
Chitpore Road, Lower	... 7A, 11.
Zakaria Street	... 41.
Giri Babu Lane	... 30.
Tirretta Bazar Street	... 3, 19.
Gopal Chandra Lane	... 3-2-2, 17.
Sovaram Basak Lane	... 1, 27-1 (2), 27-2 (2), 27-3 (3).
Chatawalia Lane	... 26, 35, 37.
Kalutolla Street	... 11-3, 34-1, 38, 65-1, 80.
Eden Hospital Road	... 14.
Machhabazar Street	... 12.
Madan Mohan Sen Lane	... 25.
Sagar Dutt Lane	... 4-B, 7-A(21).
Central Avenue	... 26, 26-1.

# SUPPLEMENT TO THE CALCUTTA GAZETTE, MA

Name of Street.

Street or holding number, with the number of  
warehouses shown in brackets, when more than one.

## Ward No. 9.

Amherst Street	... 4, 110-1, 128(2), 133-H-1, 16(2), 137-H-1, 136, 149, 11, 151.
Brajanath Dutt Lane	... 4.
Colloge Street	... 18.
Baitakhana Road	... 1, 2, 3, 4, 8, 9, 10, 5-H-1, 41, 55, 168.
Baliaghata Road	... 133, 137.
Canal West Road	... 1, 1-2.
Bowbazar Street	... 167(12), 167-H-3, 171-H-1, 198, 162-1, 172.
Circular Road Upper	... 4, 7, 8, 302-1.
Harrison Road	... 19-4 and 19-5, 40, 17-4, 17-5, 17-6.
Joynarain Chandra Lane	... 1-2-4, 1-3-A.
Nur Mahammad Sarkar Lane	... 5A, 7.
Machhabazar Street	... 60-1, 60.
Mirzapore Tank Lane	... 2-1.
Nilmoni Ganguli Lane	... 5.
Netai Babu Lane	... 1(2).
Mirzapore Street	... 27, 27-1, 27-5, 27-6, 28(2), 28-1, 29-2, 29-H-2, 31-1, 63-1(4), 63-2, 64-1, 62.
Patwarbagan Lane	... 16.
Patuntola Lane	... 20.
Prem Chand Borai Street	... 49.
Ramkanta Mistry Lane	... 1, 2.
Scott Lane	... 34-1(2), 37, 38.

## Ward No. 10.

Bentinck Street	... 77, 77-1-2, 77-1-3, 71, 71-1, 73, 76, 47, 56-4, 61.
Bowbazar Street	... 67-1.
Bentinck Lane	... 2.
Bow Street	... 8-1.
Dharamtolla Street	... 167(5).
Temple Street	... 6.
Kenderdine Lane	... 15.
Guriamah Lane	... 12.
Grant Lane	... 13.
Jebb Lane	... 3.
Khairu Lane	... 4B, 22.
Metcalf Street	... 60.
New Bowbazar Street	... 3, 3-1.
Prinsep Street	... 5, 14, 15.
Sooterkins Lane	... 34.
Weston Street	... 11, 12-1, 56, 17, 4, 22-1.

## Ward No. 11.

Bowbazar Street	... 121, 125, 127, 128-1(3), 132, 137 to 144.
St. James Lane	... 3, 20.
St. James Square	... 13.
Circular Road, Lower	... 124, 132.
Nebutala Lane	... 5-2, 11A, 34(2).
Serpentine Lane	... 67, 106.

## Ward No. 12.

Bentinck Street	... 7, 15, 39.
Cooper Lane	... 6.
Church Lane	... 6.
Lalbazar Street	... 1, 8-1, 9.
Mission Row	... 4, 7, 8.
Mangoe Lane	... 5, 25.
Vansitart Row	... 1-1.
Wellesley Place	... 7-1.

SENT TO THE CALCUTTA GAZETTE, MAR. 15, 1922.

Name of Street.

Street or holding number, with the number of  
warehouses shown in brackets  
when more than one.

Ward No. 13.

Corporation Place	... 4, 10(2), 12, 13, 15.
Sib Chandra Lane	... Wood depôt.
Corporation Street	... 122, 122-1, 129, 131, 140.
Dharamtolla Street	... 32.
Free School Street	... 15, 23, 59 (5), 72 (2), 19-3.
Lindsay Street	... 12, 12-A, 7.
Mati Sil Street	... 1-2, 2.
Wellesley Street	... 2-H-1, 10-1A.
Ripon Street	... 119.
Collin Street	... 25.
Chowringhee Place	... 4.

Ward No. 14.

Circular Road, Lower	... 76, 88, 93.
Corporation Street	... 49-64 (2), 76, 106.
Dharamtolla Street	... 88, 88-1.
Dr. Durga Ch. Banerji Street	... 22, 23, 52, 61, 49.
Gardner Lane	... 13.
Munshi Alimuddin Street	... 37.
Nawab Abdul Latif Lane	... 1, 7, 8.
Neogipuker Lane	... 30-A.
Ripon Square	... 1 (2).
Ripon Street	... 99.
Taltola Bazar Street	... 1 (2).
Wellesley Street	... 80, 83.
Neogipuker Bye-Lane	... 13.

Ward No. 15.

Circular Road, Lower	... 37.
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Ward No. 16.

St. George's Gate Road	... 1.
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Ward No. 19.

Ananda Gopal Palit Road	... 17, 18, 41, 44, 63-1, 70.
Obatu Babu Lane	... 2 (3).
Beliaghata Road	... 4-1 (2), 4-2, 4-3, 4-4, 4-5, 4-9, 4-19, 4-31, 4-6, 4-7, 4-8, 4-20, 4-12, 4-15, 4-21, 4-23, 4-24, 4-22, 4-25 (2), 4-26, 4-30, 4-27, 4-28, 4-29, 10-1.
Munshi Bazar Road	... 3.
Canal Road, South	... 1(3), 1-H-1-4, 2, 2-H-1, 3-H-1(2), 4, 5(3), 6(3), 7, 7-H-1, 8, 9, 10-H-1, 10-H-11, 12-1, 14, 15, 16(4), 17, 18, 19, 20(2), 21, 32(4), 31.
Kulia Tangra, 1st Lane	... 1.
Kulia Tangra, 2nd Lane	... 2.
Harimohan Roy Lane	... 3.
Sambhu Babu Lane	... 2, 50, 54.
South Sealdah Road	... 1-1, 2-1, 10, 12.
Circular Road, Lower	... 154(2), 154-1, 156(2), 156-1.
Tangra Road	... 14.
Cheengrihatta Road	... 48-2.
South Road Entally	... 5, 9-2, 67-1, 63-1, 18, 90.
Middle Road, Entally	... 9, 25-1, 29, 30, 37, 43-2, 39.
Kamardanga Road, South	... 7.

# SUPPLEMENT TO THE CALCUTTA GAZETTE

Name of Street.

Street or holding number, with number of  
warehouses shown in  
when more than one.

## Ward No. 20.

Jannagore Road	... 2, 3, 41.
Tantibagan Road	... 10-1 and 11.
Karaya Bazar Road	... 14.

## Ward No. 21.

Dhakuria Road	... 5.
Guriahat Road	... 48-1, 48-9.
Jhowtolla Road	... 49.
Monoharpuker Road	... 11, 107, 126.
Nepal Bhattacharji Street	... 27-1.
Russa Road South	... 133, 139-2-2(2).
Tollygunge Circular Road	... 14, 15.
Tollygunge Road	... 21-6, 69, 72(2), 74, 75, 75-1, 76(3), 112-1, 114-1, 114-3, 115-2.

## Ward No. 22.

Chaulputti Road	... 4-H-1, 30, 30-1, 50-1, 53, 56, 60.
Chakrabere Road	... 44, 44-1.
Halderpara Road	... 1.
Giris Mukherji Road	... 37-1.
Harish Mukherji Road	... 6, 138.
Hazra Road	... 1-1, 127.
Harish Chatterji Road	... 18, 27-2, 28, 29-1, 29-H-1, 33(2), 30-1, 31-2, 38, 40-1, 44-3, 30, 36, 44, 45, 46, 44-1.
Katuakhoti Road	... 7-3.
Kansaripara Road	... 61.
Kalidas Patitundi Lane	... 1, 3, 3-1.
Mahim Halder Street	... 7-1, 7-2, 32-1-1.
Kalighat Road	... 20(2), 23, 31-3, 31-2, 35, 48-4, 138-8, 141-1.
Madan Pal Lane	... 4, 6, 15, 16, 26, 28, 36-H-1, 36-2.
Nepal Bhattacharji Street	... 10-1.
Puddopuker Lane	... 2.
Russa Road, South	... 141, 143, 122-1.
Sankaripara Road	... 12.

## Ward No. 23.

Alipore Road	... 35-A, 19, 17-1, 66.
Bridge Road	... 7, 3-H, 3-37, 1, 8, 17, 19, 20, 24, 25.
Chetla Road	... 7-1.
Chetla Hat Road	... 5, 30-14.
Gopalnagar Road	... 7-1.
Judge's Court Road	... 40.
Jainuddin Mistry Lane	... 27.
Myerpore Road	... 4-1, 13-1, 73-4(2), 74.

## Ward No. 24.

Bhukoilash Road	... 1(2), 1-1, 3, 4.
Koylasarak Road	... 12.
Kantapuker Road (off Dock East Boundary) Shed.	...
Dent Mission Lane	... 27.
Pipe Road	... 11.



TO THE CALCUTTA GAZETTE, MAR. 15, 1922.

Name of Street.

Street or holding number, with the number of  
warehouses shown in brackets  
when more than one.

Ward No. 25.

Berapuker Road	...	10-1, 12(2).
Circular Garden Reach Road	...	18(2), 100, 116-H, 120-1.
Kutri Road	...	33, 35-1.
Diamond Harbour Road	...	89(4), 89-5(3), 90, 90-1(2), 89, 90-1-3(2), 90-1(3).
Gangadhar Banerji Lane	...	8-1(6), 8-2(2).
Tarafdar Tank 2nd Lane	...	8(2).
Garden Reach Road	...	10, 98(2), 86, 98(4).
Ramkamal Mukherji Street	...	27-1, 28-1.
Mansatolla Lane	...	27.
Metapuker Lane	...	27.
Nalapara Road	...	4.
Watgunge Street	...	37-1.
Munshigunge Road	...	3, 3-2, 6, 6-8, 7, 9-1, 9-15, 9-17, 11-2, 12-1, 12-H-5, 28, 29, 32, 35(2), 36, 37, 38(2), 20.
Puddapuker Street	...	1, 1-4, 2-1, 32, 41, 43, 32-1.
Puddapuker Square	...	11, 12.
Puddapuker West Lane	...	6-1, 10.

**REPORT OF THE COMMITTEE OF ENGINEERS ON THE  
NEW HOWRAH BRIDGE.**

**GOVERNMENT OF BENGAL.**

**MARINE DEPARTMENT.**

**CALCUTTA, THE 11TH MARCH 1922.**

**RESOLUTION—No. 813 Marine.**

The Report of the Committee of Engineers appointed in Bengal Government Resolution No. 3541 Marine, dated 4th November 1921, to advise Government regarding the type of the proposed new bridge between Calcutta and Howrah, is published below for general information :—

The Report complete with the plates, appendices and diagrams is available for sale at the Bengal Secretariat Book Depot.

2. Before finally deciding on the type of bridge to be adopted, the Governor in Council will consult the leading associations and others, and will be glad to have the views of any persons interested.

3. The Governor in Council desires to take this opportunity of thanking the President and Members of the Committee for their valuable and practical report.

By order of the Governor in Council,

H. E. SPRY,

*Secretary to the Government of Bengal (offg.).*

## NEW BRIDGE BETWEEN CALCUTTA AND HOWRAH.

### REPORT OF THE COMMITTEE OF ENGINEERS.

#### TERMS OF REFERENCE.

No. 3541 Marine, dated Calcutta, the 4th November 1921.

RESOLUTION—By the Government of Bengal, Marine Department.

In October 1920, public bodies and representative associations in Calcutta were consulted on the various proposals that have been made for a new bridge over the Hooghly at Howrah with special reference to the type of bridge which should be adopted. In the discussions which ensued a new point of great importance was raised as to the necessity of providing an opening span permitting the passage of ocean-going steamers. It was suggested that in modern conditions, it is unnecessary for traffic purposes for ocean-going steamers to proceed above the bridge and that the requirements of the port would be met by a bridge with a fixed headway permitting the passage of inland craft.

2. As this point appeared to have a material bearing on several of the problems arising out of the question of the type of bridge to be adopted, the Governor in Council decided that it was necessary to undertake its investigation. He has ascertained that there is no objection on the part of the naval authorities to the river above the bridge being closed to ocean-going steamers, while a representative committee, which was appointed to examine the manner in which local interests would be affected by the proposal, has reported that as a matter of fact no ocean-going steamers now proceed above the bridge except for purposes of repair, and that the only interests which would be adversely affected by the closing of the upper reaches of the Hooghly to ocean-going steamers are those of the owners and lessees of certain docks above the present bridge which are now used for repair purposes. Arrangements could, however, be made for the repair of such vessels to be carried out at docks below the bridge, and the committee have come to the conclusion that it is not necessary for the work of the port that ocean-going steamers should continue to proceed above the bridge and that it would suffice to have a bridge with a fixed headway permitting the passage of inland craft.

3. The Governor in Council has no hesitation in accepting the view of the committee that an opening span is not essential for the work of the port, and he is of opinion that the question of the new Howrah bridge has now reached a stage at which it should be possible for Government to come to a final decision as to the type of bridge to be adopted and proceed with its construction as soon as the necessary financial and other arrangements can be made. The problems involved are, however, so complex, and the advice which His Excellency in Council has received is so conflicting, that he thinks it desirable that the matter should be reviewed by a competent body before a final decision is taken, which will affect the vital interest of Calcutta for many years to come. He has accordingly decided to refer the whole question to an expert committee, and he trusts that with their advice and assistance he will be able to arrive at a conclusion which will commend itself to the judgment of the numerous and important interests concerned.

4. The complete discussions that have taken place on the subject will be laid before the committee, and it is only necessary here to summarise

very briefly the main considerations involved. The three types of bridge which have been considered are—

- (1) the single span arch,
- (2) the pier or girder type,
- (3) the floating type.

The advantages of the single span arch type are undoubted. Apart from æsthetic considerations, it would avoid the obstruction to navigation which is inevitably caused by a floating bridge and the risks of silting and changes in the course of the river which the sinking of piers would involve. On the other hand, the cost of a single span arch bridge would be high, and competent advisers take a very serious view of the risks which such a structure would run in the conditions prevalent on the banks of the Hooghly from abutment pressure, wind pressure and earthquakes. These risks would doubtless be lessened by the elimination of an opening span, but it is by no means certain that they would be reduced to an extent which would make it safe to disregard them. In the case of a pier or girder bridge, similar risks, except possibly earthquake risks, could probably be disregarded, but the Governor in Council is advised that before a bridge of this kind could be constructed, it would be necessary to sink trial piers in order to ascertain their probable effect on the river bed. These experiments would necessitate a delay of at least two or three years in starting the construction of the bridge, and even at the end of that period, the results might not be conclusive. The disadvantages of the floating type of bridge are well known. It permanently obstructs the river traffic and the necessity for periodical openings causes considerable inconvenience to road traffic also. This inconvenience and obstruction would not be greatly lessened, even if it were decided to close the river above the bridge to ocean-going steamers, since a floating bridge could not provide a permanent passage for inland craft without excessively steep approach gradients, and an opening span would therefore still be required. On the other hand, a bridge of the floating type would be more free from risks and could be constructed more cheaply and easily than any other type. If it is decided to retain a bridge of the floating type, it will be a matter for consideration whether there should be a single bridge with a wider roadway than that of the present bridge, or whether, as has been proposed by Sir Bradford Leslie who designed the present bridge, it would be preferable to replace it by a twin bridge.

5. These being the main considerations involved, the Governor in Council would like the advice of the committee in the first place on the question whether the risks attendant upon the single span arch type of bridge, even after the elimination of the opening span, are so serious as to make its adoption unduly hazardous. If it is decided that Government would not be justified in running the risks involved in the single span arch type, the committee should consider what other type they can recommend, having regard to the considerations stated above and to any other considerations which may present themselves. If, on the other hand, the committee consider that the difficulties connected with the single span arch type are not insuperable, the question will still remain whether the advantages of this type are sufficient to outweigh the additional expense involved. It has been argued that a prosperous and wealthy city like Calcutta can afford the best and most efficient bridge that modern engineering science can produce. On the other hand, the cost of the new bridge will fall directly or indirectly on the people who use it, and it has been contended that the present generation may rest satisfied with a type of bridge which, in spite of admitted drawbacks, served its purpose well until increasing traffic made it inadequate for the needs of the city, and which is free from the risks which would necessarily be involved, at least to some extent, in the adoption of any new design. Though the committee has been so constituted as to provide Government with an authoritative professional opinion on the various engineering problems involved, its members are all interested from different points

of view on the prosperity and convenience of the public of Calcutta and its neighbourhood, and the Governor in Council invites a full expression of their opinion from the widest point of view.

6. The committee will be constituted as follows:—

*Members.*

Sir Rajendra Nath Mookerjee, K.C.I.E., President.

Sir George Godfrey, Kt., Agent, Bengal-Nagpur Railway.

Mr. C. D. M. Hindley, Chairman, Port Commissioners, Calcutta.

Mr. J. McGlashan, Chief Engineer, Port Commissioners, Calcutta.

Mr. James R. Coats, Chief Engineer, Calcutta Corporation.

Mr. C. Addams Williams, C.I.E., Secretary to the Government of Bengal, Irrigation Department.

*Member and Secretary.*

Mr. G. G. Dey, Secretary to the Government of Bengal, Public Works Department.

The committee will sit in Calcutta, on such dates as may be arranged by the President, and it is hoped that they will be able to submit their report by the middle of December. Any persons interested, who desire to place their views before the committee or to give evidence, should communicate with the Secretary not later than the 15th November 1921.

## NEW BRIDGE BETWEEN CALCUTTA AND HOWRAH.

### REPORT OF THE COMMITTEE OF ENGINEERS.

#### I.—Introduction.

1. In Bengal Government Resolution No. 20 T.—Marine of the 2nd June 1921, a representative Committee was appointed to investigate and report on the necessity of an opening span in the proposed Howrah Bridge from the point of view of the working of the Port of Calcutta. The Committee submitted their report in July 1921, and expressed the opinion that it was not necessary for the work of the Port that ocean-going steamers should continue to proceed above the bridge and that it would suffice to have a bridge with a fixed headway permitting the passage of inland craft.

2. The Governor in Council accepted the view of the Committee and as previous expert advice received by Government on the type of bridge to be adopted had been based on the assumption that an opening span was required, it was decided to have the whole question re-examined by a Committee of Engineers appointed to advise Government as to the most suitable type of bridge to be constructed.

#### II.—Appointment of Committee of Engineers and terms of reference.

3. In Bengal Government Resolution No. 3541 Marine of the 4th November 1921, (pages 1 to 3), the present Committee was appointed, the terms of reference being as follows:—

- (a) Whether the risks attendant upon the single span arch-type of bridge, even after the elimination of the opening span, are so serious, as to make its adoption unduly hazardous.
- (b) If it is decided that Government would not be justified in running the risks involved in the single span arch-type, the Committee should consider what other type they can recommend, having regard to the considerations set out in the Resolution, and to any other considerations which may present themselves.
- (c) If, on the other hand, the Committee consider that the difficulties connected with the single span arch-type are not insuperable, the question will still remain whether the advantages of this type are sufficient to outweigh the additional expense involved.

The Committee were also invited to give a full expression of opinion on the most suitable type of bridge from the widest point of view.

#### III.—Proceedings.

4. The Committee assembled at its first meeting on the 15th November, and held twelve full meetings including a local inspection of the present bridge and sites in its vicinity, together with five Sub-Committee meetings. The Proceedings of these meetings are given in Appendix 1. Owing to the departure on leave of Mr. G. G. Dey, the Secretary of the Committee, Mr. C. Addams Williams was appointed in his place as Secretary from the 10th December 1921.

5. Members of the public were invited to place before the Committee any information which might be of assistance, and the following gentlemen gave evidence either oral\* or written, or both:—

Mr. Bagley, Consulting Engineer, Messrs. Gillanders, Arbuthnot & Co. (Appendix 2).

Mr. Humphryes and Mr. Radice of Messrs. Braithwaite & Co. (Appendix 3).

Mr. Colvin, Agent, East Indian Railway, and Mr. Higman, Traffic Manager, East Indian Railway (Appendix 4).

Mr. Aslett, Chief Engineer, East Indian Railway (Appendix 5).

Mr. Atkins, Chief Engineer, Calcutta Improvement Trust (Appendix 6).

Mr. Sales, Bridge Engineer, State Railways.

Mr. Remfry, Consulting Engineer (Appendix 7).

Mr. Hindley, Chairman of the Calcutta Port Commissioners (Appendix 10).

Mr. McGlashan, Chief Engineer of the Calcutta Port Commissioners (Appendix 11).

6. Papers were also received from Messrs. L. H. Swain, Bridge Engineer, Oudh and Rohilkhand Railway, B. B. Gupta, G. Dubern, H. Rolfe of Messrs. Rolfe & Co., R. M. Ghose, and R. R. Chatterjee and were considered by the Committee. Mr. Bagley's paper† on the Howrah Bridge Problem, read before the Institution of Engineers (India) in February 1921, advocating a twin floating bridge to the design of Sir Bradford Leslie, together with the subsequent discussion of this paper by the members of the Institution, was also considered by the Committee.

7. Mr. Popham, Deputy Harbour Master, gave evidence in regard to the precautions taken in the Port against vessels breaking away from their moorings and the effect of such a contingency on the proposed bridge; and a note on this subject was submitted by the Deputy Conservator of the Port (Appendix 8).

8. Mr. Bompas, Chairman, and Mr. Atkins, Chief Engineer, of the Calcutta Improvement Trust, attended a meeting by request, and gave their views (Appendix 1) in regard to the site and approaches to the bridge on the Calcutta side in relation to the operations of the Trust in the vicinity, and also in reference to arrangements for traffic using the bridge, and our recommendations on these matters, based on their opinions, are shown on Plate No. I submitted with this report.

#### IV.—Headway.

9. The Committee decided that as the necessity for providing an opening span had been eliminated, the first question to be decided was the amount of headway to be allowed under the bridge for river traffic. Conferences were therefore arranged with the representatives of the River Steamer Companies concerned, with Messrs. Addams Williams and McGlashan, in order to determine the headway to be allowed in the case of (a) a fixed bridge, (b) a floating bridge. It was found that practically all the largest inland steamers now in use, or under construction, or likely to be constructed in the future, were 37½ feet or less overall in height, and with a draft of 5 feet would require 32½ feet actual clearance between the under side of the bridge and the water surface, which means that for practical purposes such a steamer could not be safely passed under the bridge unless there were a clearance of 35 feet. An investigation of the rise and fall of the tides throughout the year, demonstrated by diagrams, the more important of which are printed in Appendix 1, showed that a headway of 29 feet above high water of spring tides (22.50 feet above old

\* Appendix 1.

† Printed in the Proceedings of the Institution of Engineers (India), Vol. I, September 1921.



Kidderpore Dock sill), in the case of a fixed bridge, would provide 35 feet of clearance for no less than 12 hours in the 24 even on the day of the highest spring tide of the year. During the remainder of the year, for no less than 92 per cent. of the time, all such vessels could pass through, and at low water the clearance would be as much as 48 feet. Even if an extra 3 feet clearance were required to allow for contingencies of draft and weather and other navigation restrictions, this clearance would still be available for 8½ hours on the day of the worst high water tide of the year. It was therefore decided to adopt 29 feet as the necessary headway above high water spring tides.

In the case of a floating bridge, it is obvious that the headway would be a fixed one, independent of the state of the tide, except for slight differences due to variable loading of the bridge, rough weather and the effect of uneven loading on the draft of vessels. It was decided that with a floating bridge the headway allowed should not be less than 35 feet.

10. The representatives of the Steamer Companies accepted these figures (Appendix 9) and we have no hesitation in recommending them for adoption in the final design. The question of gradient of the roadway, which we discuss later in the report, has an important bearing on the matter of headway, and in securing the agreement of the Steamer Companies to the figures now mentioned, we are satisfied that their operations, either in the present or the future, will not be unduly hampered, while the headway adopted permits of satisfactory gradients being obtained for the roadway on a fixed bridge. In accordance with this finding, our subsequent recommendations are based on these figures.

#### V.—Types of Bridges.

11. *Single Span Arch Bridge.*—We have had before us all the different proposals which have been made in the past and have carefully considered their relative merits. As instructed in our terms of reference, we have considered first the proposal for a single span arch bridge, a sketch design for which was submitted to Government by Mr. Basil Mott. The primary objections to Mr. Mott's design are firstly the difficulty, if not the impracticability, and secondly the prohibitive expense, of securing the abutments on the deltaic soil of the Hooghly against lateral movement due to the horizontal thrust of the arch. Any such movement would cause a deformation of the arch with sagging of the suspended platform and might lead to the collapse of the whole structure. With the knowledge which we possess of the conditions of the soil in Calcutta, we should not be justified in recommending the adoption of a structure which would be liable to total destruction through movement in the abutments. It is true that eliminating the opening span simplifies matters and makes it possible to take up this horizontal thrust by means of a bottom tension chord, but this would not only greatly increase the cost, but on account of the gradient on the chord would also set up secondary stresses of great magnitude in the other members, between the top and bottom booms of the arch. Such a modification would in fact produce a bow-string girder of excessive height and uneconomical proportions. This type has never been adopted for a span larger than 720 feet (over the Ohio River at Metropolis, Illinois).

12. We are, moreover, much influenced by the difficulties of erection of a bridge such as Mr. Mott has recommended or even of a modification of the design which would follow on the elimination of the opening span. Having taken into consideration the most modern methods of erecting such a structure which are known to us, we believe that it would be necessary to provide erection towers on each bank about 300 feet high. The whole of the material used in these towers, as well as the expensive erection plant, would be of little or no value when dismantled, and this would add considerably to the cost of the scheme. Temporary anchorages would have to be provided, which would extend to a considerable distance inland and

would involve great interference with expensive property in the neighbourhood. We realise that interference of this kind in Calcutta, except in the case of land owned by Government or a public authority, is not always such as can be compensated for by money payments, and we anticipate most serious delay, and possible opposition, to the scheme if such operations as would be involved in the erection of an arch structure were attempted anywhere near the present site of the bridge.

We have carefully considered the probable effects of storms and earthquakes. We believe that this type of bridge would be more liable to damage from such causes than any other type of fixed bridge. We would emphasize the fact that engineering experience in regard to this type of structure is limited to observations on no span as large as 1,000 feet, whereas the span of the bridge over the Hooghly cannot be made less than 1,400 feet. The largest single arch span as yet built is that of the "Hell Gate" Bridge over East River, New York, the span of which is 977 feet and which is founded on rock. We do not consider that it is within our duty to recommend an experiment of this nature, even though it should prove that the foundations are more suitable than we believe them to be.

We therefore answer the first question, in our terms of reference in the affirmative.

We estimate that the weight of such a structure, including live loads, would be approximately 20,000 tons on each abutment and that the cost would be in the neighbourhood of £3,000,000, including abutments and approaches, but excluding any compensation for land or property.

This estimate, together with the other estimates given in this report for other types of bridges, is also exclusive of any compensation which may have to be paid for interference with docking interests above the present bridge, due to the omission of an opening span, a factor which is common to all of the types considered.

13. With the rejection of a single arch span we have the choice before us of the following types of bridge:—

- Suspension bridge.
- Pier and girder bridge.
- Floating bridge.
- Cantilever bridge.

14. *Suspension Bridge.*—Most of the disadvantages of the single span arch bridge which have led us to reject that type are inherent in the suspension bridge type. The construction of the anchorages would interfere with valuable property, while the cables would form a permanent obstruction to roadways and buildings, particularly on the Calcutta side of the river. An attempt to bring the anchorages so near to the river bank as to avoid this interference and obstruction would necessitate building the abutments in the river itself, thereby not only narrowing the waterway but introducing into the stream the same adverse influences which have led us, as explained later in the report, to the rejection of any proposal involving the construction of piers in the river bed. The lateral strengthening of the structure which would be necessary to meet wind pressure would mean considerable expenditure, while the danger from abnormal storms or earthquakes would be nearly as great as in the case of an arch bridge. We are also of opinion that the cost of maintenance in such a bridge would be considerably higher than in other types of fixed bridge. Its massive masonry anchorages would also be subject to forces the horizontal component of which we consider would be difficult to arrange for and which would introduce a degree of risk which we should not be justified in recommending.

15. The cost may be roughly estimated at £2,500,000. We are not impressed with any of the advantages claimed for this type of bridge, and its disadvantages lead us to reject it as unsuitable to the particular local conditions.

16. *Pier and Girder Bridge.*—We have given this type of bridge our very careful consideration. It has been strongly recommended to us by

expert opinion, and its comparatively low cost and its other advantages are considerations which would ordinarily outweigh any but the most serious objections from other points of view.

17. The question whether piers can be safely constructed in the River Hooghly at or near the present site has formed a controversial issue between experts for many years past. The Commissioners for the Port of Calcutta, who as Conservators of the River Hooghly are responsible for the maintenance of the waterway through the Port, have laid it down that no piers should be permitted at this place. After considering the report of the Committee of Engineers of 1910, the Port Commissioners imposed this prohibition as a fundamental condition in the call for designs and tenders in 1911, and have recently reaffirmed it in their letter to Government when dealing with a reference on the general question of the bridge in 1920. We have included in the appendix to this report, papers showing the importance which the Port Commissioners attach to this condition (Appendix 10).

18. Under their statutory powers the Port Commissioners may have the right to enforce this prohibition, but we considered that we should not be justified in basing our recommendations on it without examining the evidence and the expert opinions on which the principle has been arrived at. Mr. McGlashan's note on this subject (Appendix 11) shows clearly what were the reasons for this prohibition, and we are impressed with the fact that all recorded experience and available expert opinion on the River Hooghly point to considerable danger as likely to arise through the introduction of piers into the river bed.

19. We are not satisfied that further investigation and prolonged practical work on the river would not lead to a demonstration that such danger could not be kept by engineering means within negligible limits, but we are satisfied that the present knowledge is not sufficient to justify the Conservators in taking the risk of allowing the construction of piers, and that the accumulation of further experimental data which are required for a settlement of this difficult question would involve operations which might be in themselves a source of danger to existing Port facilities and might cause several years of delay in constructing the bridge, a delay which cannot be contemplated with equanimity either by the Government or the public.

We have also given special weight to the vital necessity, brought clearly to notice by the Nadia Rivers Committee, of preserving unimpaired by all possible means the tidal flow through the Port on which for eight months of the year the existence of the waterway depends. We consider that this adds force to the expert opinion on which the Port Commissioners' decision upon this question has been based.

20. It is in contemplation to permit the use of piers in the construction of the proposed new railway bridge over the Hooghly at Bally, where the width of the river renders any other type of bridge impracticable, and in this connection we would draw attention to the following opinion of Sir Francis Spring given to the Port Commissioners in 1913 with reference to that bridge:—

"I am of opinion that piers of more or less 20 feet thick, founded on wells of a size more or less 60 feet by 37 feet and sunk to a depth of 40 or 50 feet below the bottom level of the deepest hole to be found anywhere in the river within three or four miles of the site, will not be likely to cause currents or swirls detrimental to the régime of the river, or likely to affect any interest situated beyond a mile downstream from the chosen site of the bridge."

There would therefore appear to be justification for permitting piers in the river at a distance from the specially important Calcutta area, while forbidding their use in Calcutta itself.

21. We have already mentioned the comparatively low cost of such a structure and we believe that it could be built for £1,600,000, but for cogent reasons which we have fully explained we are unable to recommend the adoption of this type.

22. *Floating Bridge.*—We have carefully considered the design submitted to the Government of Bengal by Sir Bradford Leslie and have had the advantage of Mr. Bagley's exposition of the proposal. We have also had before us the discussion which took place at the Institution of Engineers (India) on the paper read before that body on this proposal in February 1921. The design is based on the supposition that an opening span should be provided, and the principle recommended is that of twin bridges supported on clusters of pontoons with an opening span of 210 feet in each bridge. We consider that to accommodate the traffic which it is anticipated will pass over the bridge in the future, the adoption of the floating type necessitates the twin bridge construction, which introduces certain serious difficulties in connection with the approaches. Diagrams to show the movement of road traffic with such a bridge indicate that there would be a good deal of inconvenience and confusion, with consequent congestion, caused by the numerous crossing streams of traffic at the junctions of the approaches with the main roads on either side of the river (Appendix 2).

23. The design submitted by Sir Bradford Leslie would require modification to suit the elimination of the opening span, and we can only make general assumptions as to the design which he would recommend if he were asked to re-design the bridge to suit the new conditions. We are, however, struck very forcibly by certain important disadvantages inherent in this type of bridge.

24. As shown in paragraph 9, a headway of 35 feet must be allowed at all states of the tide, and this involves at periods of high water much steeper gradients on the road than with a fixed bridge, although we admit that on the average the gradients would be more favourable with the floating bridge.

25. The change in gradient with the rise and fall of the tide would introduce a serious and most adverse complication in regard to the running of trams over the bridge. We have examined diagrams which have been prepared to show the effect on running trams of the alterations in the vertical angle of tram lines at the points where the gradients would be constantly changing, and find that it would be difficult to design tram cars or rail joints which would ensure running over these flexure points with either comfort or safety. This difficulty is not peculiar to Sir Bradford Leslie's design, but would occur in any bridge of a floating type designed to suit the conditions regarding headway which are essential.

26. One of the greatest disadvantages of a floating type of bridge, whether twin or single, is that with this type the permissible loading would be very far short of what we consider it necessary to provide for. We have it in evidence from Mr. Bagley that no floating bridge could be designed with a floor of sufficient strength for the loading which, in our opinion, is essential if the road traffic between Calcutta and Howrah is not to be permanently hampered by restrictions such as would not be acceptable in any modern city.

While designing a work the whole object of which is the improvement of means of road transport in this city we are satisfied that it would be a retrograde step to introduce with the construction of that work a restriction which would affect unfavourably the future development of mechanical road traction.

27. In considering this type of bridge we have taken evidence on the probable effect of a collision between a large ocean-going steamer and the bridge. Our attention has been drawn to this possibility by expert witnesses who were unfavourable to any fixed structure being constructed over the Hooghly at this point. We understand that the method of controlling the mooring and movement of ships in the Port makes it practically impossible for a large ship to become unmanageable and collide with the bridge. At the same time we cannot exclude such an eventuality, and we find both from our own judgment and from that of several expert witnesses that in such an event the effect on a fixed bridge would be considerably less than on a floating bridge. In the latter case, with the long pontoons in clusters, which would be necessary, there is grave

risk of several of them being sunk and of the whole bridge being wrecked, while with a fixed bridge the damage done to the ship would be much more serious than to the structure of the bridge, which in any type would be of great stiffness where it would be liable to be struck by the superstructure of a ship.

28. Another disadvantage of a floating bridge is the difficulty of inland vessels negotiating the fairway without colliding with the pontoons. With the present bridge these inland vessels only use the opening at high water slack, when there is little or no current in the river, but with a non-opening span type of floating bridge these vessels would pass under it at all states of the tide, and in the case of a large steamer towing two large flats abreast with a total beam of 150 feet, the most careful navigation would be required in the strong diagonal currents, to avoid fouling the clusters of pontoons.

29. Further, the obstruction caused by the pontoons to the free flow of water, while not producing an effect comparable to that of the piers of a fixed bridge, must have some effect on the tidal flow in the river, and it is most desirable, as we have already pointed out, that such interference should not be permitted if it is possible to avoid it.

30. In regard to recurring cost, we are of opinion that the annual cost of maintenance of a bridge of the floating type would be much greater than in the case of a fixed bridge, where the whole of the steel work would be above water level and easily accessible.

31. The estimate for this type is placed at £1,650,000 for twin bridges, to which must be added the capitalized value of the heavier recurring maintenance charges, the amount of which we have not estimated.\*

32. Our considered opinion on a floating bridge is that it can only be regarded as second best for local conditions, and that it would be merely a temporary solution of the problem, that it would be insuitable in many important respects, and finally, that it would be altogether unworthy of a great City.

33. *Cantilever Bridge.*—The cantilever type of bridge is regarded by eminent Bridge Engineers as the most economical of large span bridges in first cost. It was adopted for a span of 1,800 feet at Quebec over the St. Lawrence River and for a span of 1,700 feet at the Forth Bridge and in other cases where the primary consideration was the necessity for a large clear span over water. It is capable of being constructed with comparative ease and without elaborate staging, and the gradual imposition of the load on the foundations during the process of construction gives it a great advantage over an arch bridge, where a sudden change in the distribution of pressure takes place when the erection staging is removed. A cantilever bridge has also great rigidity against live loads and wind stresses and provides ease of inspection and maintenance. It is one of the types of fixed bridges least likely to be damaged by earthquakes.

34. We find that it is possible to design a cantilever bridge, the anchor arms of which would not interfere with traffic in the adjoining streets, either during the period of construction or permanently. This is a very important consideration and one which has influenced us in deciding to recommend the adoption of this type.

35. It is true that with this type the weight on the abutments will be high, but the pressure will be vertical and there is no horizontal component to be arranged for, as in the case of the arch or suspension bridge. An approximate estimate of the weight on each abutment with this type of bridge is 30,000 tons, and with the hitherto accepted figure for permissible foundation pressure in Calcutta this would mean providing a very large foundation area.

During the progress of our work, however, a very valuable experiment has been conducted by the Chief Engineer of the Port Commissioners on

\* Since this report was in print we have received information that a well known Bridge Company are prepared to construct a twin floating bridge to Sir Bradford Leslie's design for a sum of £1,600,000 within a period of 2½ years. This information confirms our estimate but in no way alters the opinions we have expressed in this report.

the nature of the soil at the site which we recommend for the bridge, the results of which have been placed at our disposal by the Port Commissioners. Borings have been made which have proved the existence of a stratum of hard grey clay at a depth of 97 feet below the surface (+ 24.00) on the Calcutta side and 79 feet on the Howrah side. The borings were taken down 55 feet into this hard clay on both sides of the river. The experiment which is still in progress, has shown that this clay will stand a load of  $5\frac{1}{2}$  tons per square foot with a total sinkage of only  $\frac{1}{8}$  in. of an inch after 25 days' trial. It is therefore clear that there will be no difficulty whatever in providing for the total pressure on the abutments of the cantilever bridge with a foundation area of reasonable size and without extensive interference with neighbouring buildings and property.

36. From figures given to us by expert bridge builders we estimate the cost of this type of bridge at £2,000,000 and are of opinion that it could be constructed in  $3\frac{1}{2}$  years from the date of commencement.

37. After carefully considering the whole problem in all its bearings we unanimously recommend the adoption of the cantilever type, which we believe is eminently suitable to the particular conditions of this river crossing and will give better value for the money expended in convenience to road and river traffic, in length of life and in cheapness of upkeep than any other type which could be adopted.

We have shown in Plate No. I, prepared by Mr. McGlashan, an outline design for a cantilever bridge, and while rigid adherence to this particular design is not absolutely necessary, we consider that the leading dimensions should not be departed from to any great extent. A perspective view is shown on Plate No. IV.

#### VI.—Site and Gradients.

38. The site of the existing bridge is unsuitable for a new fixed bridge owing to difficulties connected with construction. It would be necessary to remove the present bridge temporarily to another site previously prepared, before construction could be commenced, and to divert the roads to suit this new site. Apart from questions of expense, the inconvenience caused by such an operation involving serious interruptions to traffic, both on the river and on the roads, in the case of the latter extending to ten days or more, render it a practical impossibility. It is clear therefore that another site must be selected.

The object to be aimed at is to provide a direct link between the important traffic centre at the junction of Harrison Road and Strand Road on the Calcutta side, with Howrah Station and the system of roads on the Howrah side which are based on the Grand Trunk Road. The present site provides this link in the most direct form, but apart from constructional difficulties we find that it is impossible to arrange the approach roads for this site with reasonable gradients to serve the Strand Road and Harrison Road without considerable interference with valuable property, or to serve Howrah Station without an unnecessarily long detour.

39. Any site below the present bridge and in its immediate proximity would present the same difficulties as regards gradients, and would also interfere with important property on the Calcutta side while interfering with Howrah Station and providing a very indirect approach to the Grand Trunk Road on the Howrah side.

40. A possible site 250 feet upstream, between Chattu Lall Ghat and Goenka Ghat, on the Calcutta side would involve somewhat similar difficulties as regards gradients on the approaches, while it would be difficult to avoid interference with the former ghat, which we have ascertained is undesirable on religious grounds. After careful inspection of the locality we have decided that the best site is on a centre line, commencing on the Calcutta side 630 feet above the centre line of the present bridge, between the south end of the Port Commissioners' Jagganath Ghat shed and Mullick Ghat, and running to a point on the Howrah side 580 feet above the centre line of the



present bridge. The exact position of the abutment and approach on the Howrah side can be selected without such restrictions as exist on the Calcutta side, as the land on the former side is already the property of a public body, namely, the Port Commissioners, the present lessees, Messrs. Jessop & Co., holding leases which can be terminated by suitable arrangement. In fixing the centre line we have therefore adopted a direction at right angles to the main axis of the river at this point which will provide the shortest crossing compatible with non-interference with the river.

41. Proximity of the foundation construction operations to the Port Commissioners' sheds and Mullick Ghat may cause some risk to parts of those buildings, as experiments have shown that the disturbing effect of such operations may extend to a distance of 100 feet from the outside of the foundations. This risk can, however, be reduced by suitable precautions, and we do not anticipate the necessity for any very extensive reconstruction of those buildings. The small Shradh Ghat adjoining Mullick Ghat would, however, be interfered with seriously and before the foundations of the bridge are commenced it will be necessary to rebuild it elsewhere on a suitable site, to which we have ascertained there is no objection on religious or other grounds.

42. In deciding on our recommendations in regard to the approach roads on the Calcutta side, we have taken the advice of the Calcutta Improvement Trust, while on the Howrah side, in the absence of any definite recommendation from any local authority, we have accepted a lay-out suggested by the Chief Engineer of the East Indian Railway, which provides a suitable access to Howrah Station and also to the Grand Trunk Road, partly through property which is now being developed by that Railway as a residential quarter. The site and the approaches are shown on Plate No. I attached to this report and provide for gradients not steeper than 1 in 40 on the straight portions and 1 in 80 on the curved portions.

43. We have already stated in this report that the adoption of a fixed type of bridge enables the headway over high water (+ 22.50) to be reduced to 29 feet as compared with the headway of 35 feet over the same water level in the case of a floating bridge. This means that the highest level to which all road traffic must be raised is + 56.00 over datum in the case of a fixed bridge compared with + 62.00 in the case of a floating bridge at high water, the level of Strand Road being about + 25.00. In the former case we are enabled to provide for a permanent grading on the bridge of 1 in 50 with 200 feet level in the centre, whereas in the latter case the gradient would have to be 1 in 38.20 at high water, and this gradient would remain constant on either slope of the central span. This comparison is indicated on Plate No. II printed with the report, which also shows the gradients which we recommend for adoption in designing the cantilever bridge.

44. We do not attach much importance to the additional distance of about 200 yards for traffic coming from the south of Calcutta to Howrah and *vice versa*, while for traffic from or to the north of Calcutta a similar distance will be saved. It is possible that the new position of the bridge will reduce to some extent the room now available for manœuvring inland vessels at the Jagganath Ghat sheds, but we do not consider that this will impair the convenience of this landing place or adversely affect the interests of the Inland Steamer Companies to any extent. The ferry landing stage at present on the site selected on the Calcutta side will require removal to a new position, but this will not involve either great expense or any serious inconvenience to passengers. The Port Commissioners' Railway line along the Strand Bank will require to be regraded and carried in a subway under the bridge approach, but with the experience gained in constructing the subway under the present bridge approach this will not present any engineering difficulty.

45. We may note here that the lay-out of the approaches on the Calcutta side will necessitate the absorption of land at present occupied



by the Mint on the river side of Strand Road. It is essential that no undue delay be incurred in effecting the removal of the Mint, the desirability of which on general grounds we understand has already been accepted. We are informed that negotiations in this direction are now in progress between the Calcutta Improvement Trust and the Government of India.

#### VII.—Width of Roadway and Loading.

46. It is necessary to provide for a line of tramway in each direction over the bridge, and the density of traffic moving over the present bridge and its growth in recent years clearly show that at least three lines of vehicular traffic each way should be accommodated, in addition to the tramways.

47. In regard to the footpaths, a calculation based on the rate at which passengers from Howrah Station can be given access to the bridge from trains at the rush hours, shows that a footpath 12 feet wide on each side will not be excessive. Allowance has been made both for normal growth of foot traffic and for the fact that the tramways will accommodate many who now go on foot.

48. Allowing 18 feet for the two lines of tramway, 58 feet for the six lines of traffic and 24 feet for the two footpaths, we have a total width of 100 feet, and this is the figure we recommend for adoption in designing the bridge, the footpaths being placed outside the main girders as shown in Plate No. III. We consider it of importance thus to separate the foot passenger traffic from the wheeled traffic.

49. In considering the question of loading we have had the advantage of the investigations recently made in connection with the design for the bridge over Tolly's Nullah at Kidderpore. We recommend that the following loadings should be provided for on the roadway:—

- (a) Tramcars having a bogie wheel base of 18 feet and a total load of 25 tons.
- (b) Motor lorries with 4 tons on front and 12 tons on back axle spaced 12 feet apart.
- (c) Steam rollers, weight 15 tons with 9 tons on front and 6 tons on back axle, spaced 11 feet apart.

and for a width of 12 feet on the outer sides of the roadway—

- (d) Tractors with 10 tons on front axle and 12 tons on back axle, spaced 10 feet apart, followed by boiler trucks with 25 tons on each axle spaced 12 feet apart, the distance between the back axle of the tractor and the front axle of the boiler truck being 10 feet.

For the purpose of the design of all subsidiary members directly affected, such as floor beams and secondary trusses, the abovementioned moving loads will be concentrated loads, and we recommend that tramcars should be considered as developing an initial impact of 40 per cent. of their static load, and motor lorries 50 per cent. No impact need, we think, be allowed for steam rollers or tractors. In computing the load for the main members, we are of opinion that allowance should be made for a continuous stream of tramcars on both tracks.

#### VIII.—Compensation for land, etc.

50. In furnishing estimated figures for the cost of the different types of bridge considered we have not included the compensation to be paid for land occupied or for interference with other rights. The amount of such compensation would have to be settled under the Land Acquisition Act, or otherwise, and we do not consider it to be within our province to prejudice any such proceedings by mentioning probable figures for the expenditure involved. We desire, however, to indicate the various directions in which liability for such compensation may arise.

51. On the Calcutta side, the land to be occupied by the foundation and approaches is Government land, partly in the occupation of the Port Commissioners and partly in the occupation of the Mint.

The cost of protecting, or in the alternative, making good any damage done to Mullick Ghat and to the Port Commissioners' shed at Jagganath Ghat would have to be met from the Bridge Project Funds, as well as the cost of reconstructing the Shradh Ghat on another site, the removal of the passenger landing stage, and the extension of the railway subway.

52. On the Howrah side of the river the Bridge Project Funds would have to meet the compensation which might be legally found to be due in respect of the termination of the lease of such portion of the Port Commissioners' land as is held by Messrs. Jessop & Co.

53. For the connection between the foot of the graded approach and the Grand Trunk Road, acquisition of land would be necessary, but whether the cost of this should fall on the Bridge Project Funds, or on the local authority responsible for road connections we are not in a position to say. It would appear reasonable that the improvements to the road connections which the new bridge will render possible and which are in any case badly needed at the present time should form a liability on the local authority and, in the event of an Improvement Trust being formed for Howrah, the duty would be that of the Trust.

54. Lastly, we have to mention that in connection with the decision of Government that an opening span is not required in the new bridge, it has been stated by the Committee who reported on that question that "the only interests which would be injuriously affected would be those of the owners and lessees of the Docks above the bridge which are at present in actual use for docking ocean-going steamers."

The question whether compensation would be legally due to such interests and the amount of such compensation is a matter which must be left for settlement by proper authority, but we have mentioned it in view of the contingent liability which may have to be met by the Bridge Project Funds and which would form an addition to the initial cost of the bridge.

#### IX.—Condition of the present floating bridge.

55. As already stated, we have made an inspection of the present bridge, and although we have not been instructed in our terms of reference to report on the structure, we think it desirable in dealing with the question of replacement that we should record our opinion upon its condition, because the necessity, which is obvious to us, of arranging for its very early replacement has been a factor in our consideration of the type to be adopted.

At our inspection the condition of the bridge was explained to us by Mr. McGlashan, Chief Engineer to the Port Commissioners. In the year 1916 extensive repairs had to be undertaken owing primarily to the deterioration of the timber beams carrying the floorway. In the course of replacement of these beams by steel girders the whole of the structure was found to be in a very unsatisfactory condition, and one shore span in particular was found to be so weakened by corrosion and decay in the main booms that special ties had to be designed and applied to enable the girders to stand up to their work. We may say that three of the members of the present Committee had an opportunity of inspecting the bridge at the time when these operations were in progress. The repairs then undertaken were not intended or expected to enable the bridge to be retained for more than a few years, and any great delay in replacing it, would involve most serious risks and might result in its total loss. It is not necessary for us to emphasize the effects of such a loss on the whole life of Calcutta and its suburbs.

We therefore strongly recommend that without waiting for a decision as to the sources from which financial provision is to be made for the construction of the new bridge, steps should be taken at once by Government through their Consulting Engineers to obtain a specification and tenders for the bridge as recommended by us. We believe that the information and diagrams given in this report are sufficient for the purpose.

**X.—Summary of Recommendations.**

56. We can now summarise our recommendations:—

- (a) We recommend, in view of the serious condition of the existing floating bridge and the grave consequences which would result from its failure, that no time be lost in providing a new bridge over the River Hooghly.
- (b) We recommend that the bridge should be built of the cantilever type to the leading dimensions, loading and general description shown in this report.
- (c) We recommend that the new bridge should be built on the site shown in Plate No. I on a centre line running from a point 630 feet north of the centre of the present bridge on the Calcutta side, to a point 580 feet north of the centre of the present bridge on the Howrah side.
- (d) We recommend that steps should be taken at once by Government to obtain a specification and tenders for the bridge recommended by us, without waiting for a decision in regard to the financing of the bridge construction.

57. As already stated in the body of our report, we have answered the first question in our terms of reference in the affirmative, the second question is answered by our recommendation of the cantilever type, and the third question does not arise.

R. N. MOOKERJEE.

G. GODFREY.

C. D. M. HINDLEY.

J. McGLASHAN.

JAMES R. COATS.

C. ADDAMS WILLIAMS.

CALCUTTA,

*The 15th February 1922.*

NOTE.—Mr. Dey being absent, has not signed the report but concurs with our recommendations.

**Statement showing the gauge readings at Dacca Water-works Station on the River Buriganga for the week ending the 25th February 1922.**

Date.	At 7 A.M.	AT HIGHEST WATER.		AT LOWEST WATER.		At 5 P.M.	REMARKS.
		Time.	Readings.	Time.	Readings.		
1922. 19th Feb.	52.85	16-40	53.8	10-50	52.0	53.7	F. T. at 11-3 and R. T. at 10-40
20th "	52.65	17-25	53.45	11-56	51.85	53.25	F. T. at 12-10 and R. T. at 12-40.
21st "	52.8	7-20	53.0	15-10	51.7	52.8	R. T. at 7-35 and F. T. at 12-25.
22nd "	52.65	8-25	52.9	14-35	51.5	52.4	R. T. at 8-45 and F. T. at 14-40.
23rd "	52.6	9-40	52.9	15-40	51.2	51.3	R. T. at 9-45 and F. T. at 15-0.
24th "	52.4	10-30	53.2	17-0	51.2	51.2	R. T. at 10-45 and F. T. at 17-25.
25th "	52.0	11-20	53.0	...	...	51.9	R. T. at 11-35.

*Notable high and low water-levels of previous years.*

					High.
27th August	1906	...	...	...	70.5
5th September	1909	...	...	...	67.86
10th August	1910	...	...	...	69.86
1st "	1911	...	...	...	68.48
15th "	1912	...	...	...	67.16
31st "	1916	...	...	...	69.7
18th "	1916	...	...	...	68.1
17th "	1917	...	...	...	67.1
31st "	1918	...	...	...	68.12
2nd "	1919	...	...	...	66.8
8th September	1920	...	...	...	68.9
28th July	1921	...	...	...	66.4
					Low.
26th February	1907	...	...	...	54.08
15th "	1908	...	...	...	51.06
12th March	1912	...	...	...	51.05
6th "	1914	...	...	...	50.60
22nd February	1915	...	...	...	50.60
10th "	1916	...	...	...	50.60
3rd March	1917	...	...	...	51.0
21st February	1918	...	...	...	51.40
25th "	1919	...	...	...	50.4
18th "	1920	...	...	...	50.9
19th "	1921	...	...	...	50.9

N.B.—Zero of the gauge at Dacca Water-works = - 48.51 with reference to P. W. D. datum.

DACCA,  
The 5th March 1922.

BENODE BEHARI ROY,  
for Executive Engineer, Dacca Division.

**Statement of weekly gauge readings on the river Ganges at Rampur Boalia for the week ending the 4th March 1922.**

Date.	Hour.	Height of surface above or below zero: minus sign for those below zero.	Height of surface above mean sea-level according to P. W. D. datum.	Height of surface above mean sea-level on the same date last year according to P. W. D. datum.	Remarks.
1922.					
26th Feb.	8 A.M.	Zero of gauge is at mean sea-level.	36.40	36.10	P. W. D. datum 8.25 feet above Kidderpore old dock sill.  B. M. on College step 64.98.
27th "	8 "		36.30	36.10	
28th "	8 "		36.25	36.10	
1st Mar.	8 "		36.20	36.05	
2nd "	8 "		36.10	36.05	
3rd "	8 "		36.05	36.00	
4th "	8 "		36.00	36.00	

			Old value.	According to P. W. D. datum.
The previous year	Highest water-level	...	59.25 on 7th September 1921	60.80
Ditto	Lowest "	...	33.39 on 21st April 1921	34.90
Record	Highest "	...	68.25 on 26th August 1875	64.44
Do.	Ditto	...	69.08 on 9th September 1885	64.27
Do.	Ditto	...	68.80 on 26th August 1906	63.47
Do.	Ditto	...	68.21 on 26th August 1890	65.40
Do.	Lowest "	...	37.43 on 25th April 1884	32.82
Do.	Ditto	...	38.13 on 14th and 15th April 1888	33.32
Do.	Ditto	...	38.02 on 21st and 22nd April 1897	34.21
Do.	Ditto	...	39.28 on 6th and 7th May 1908	34.47

N. B.—The gauge readings commenced from the 1st August 1887.

BOALIA,  
The 4th March 1922.

S. C. BHATTACHARJI,  
for Executive Engineer, Rajshahi Division.

**Statement of weekly gauge readings on the rivers Ganges and Brahmaputra at Goalundo for the week ending the 4th March 1922.**

Month and date.	Hour.	Height of surface above or below zero of gauge.	Height of surface above mean sea-level.	Height of surface above mean sea-level on same date last year.	Remarks.
1922.					
26th Feb.	7 A.M.	5.4	5.4	5.4	Zero is placed at mean sea-level.  The bench-mark for the gauge is on a pucca pillar between the passenger ghat and Chandpur ghat. Its reduced level is 26.84.
27th "	7 "	5.5	5.5	5.2	
28th "	7 "	5.5	5.5	5.1	
1st Mar.	7 "	5.6	5.6	4.9	
2nd "	7 "	5.6	5.6	4.8	
3rd "	7 "	5.7	5.7	4.6	
4th "	7 "	5.8	5.8	4.3	

The previous year	Highest water-level	...	25.8 on 27th February 1921.
Ditto	Lowest "	...	4.8 on 18th February and 4th March 1921.
Record (H.P. in Brahmaputra and Ganges)	Highest "	...	25.75 on 28th August 1906.
Record (average flood in Brahmaputra and Ganges)	Ditto	...	26.74 on 20th and 21st August 1883.
Record (H.P. in Brahmaputra and Ganges)	Ditto	...	25.66 on 11th to 17th and 31st August and on 1st to 3rd September 1889.
Record (B.F. in Brahmaputra only)	Ditto	...	25.66 on 31st July 1900.
Do.	Lowest "	...	1.0 on 8th February 1914.
Do.	Ditto	...	2.42 on 18th March 1908.
Do.	Ditto	...	2.91 on 21st to 24th February and 8th to 9th March 1884.
Do.	Ditto	...	3.16 on 6th to 11th March 1886.
Do.	Ditto	...	3.16 on 16th, 17th and 20th to 31st March 1901.

N. B.—The gauge-readings commenced from 3rd October 1909.

RAJBARI,  
The 5th March 1922.

R. C. GUHA,  
for Subdivisional Officer, P. W. D., Faridpur.

Wholesale prices-current of food-grains, oil, etc., in the under-mentioned marts of Bengal for the second-half of February 1922.

Marts.	PADDY (BEST QUALITY).						
	Present return.	Next preceding return.	Corresponding return of 1921.	Corresponding return of 1920.	Corresponding return of 1919.	Corresponding return of 1918.	Corresponding return of 1917.
	1	2	3	4	5	6	7
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Calcutta	3 5 0	3 2 0	3 12 0	4 2 0	3 5 0	2 12 0	2 0 0
Chokla Hat	3 5 0	3 7 0	3 12 0	4 3 0	3 2 0	2 0 0	2 4 0
Burdwan	3 5 0	3 7 0	3 12 0	4 3 0	3 2 0	2 0 0	2 4 0
Kalna	3 5 0	3 7 0	3 12 0	4 3 0	3 2 0	2 0 0	2 4 0
Raniganj	3 5 0	3 7 0	3 12 0	4 3 0	3 2 0	2 0 0	2 4 0
Midnapore	3 0 0	2 8 0	3 5 0	(a)	3 0 0	2 2 0	2 0 0
Chittagong	3 0 0	(a)	(a)	(a)	3 0 0	2 2 0	2 0 0
Chandpur	3 2 0	2 4 0	3 12 0	4 3 0	3 5 0	2 4 0	3 4 0
Dacca	3 2 0	2 4 0	3 12 0	4 3 0	3 5 0	2 4 0	3 4 0
Karayanganj	3 2 0	2 4 0	3 12 0	4 3 0	3 5 0	2 4 0	3 4 0
Mymensingh	3 2 0	2 4 0	3 12 0	4 3 0	3 5 0	2 4 0	3 4 0
Madaripur	3 2 0	2 4 0	3 12 0	4 3 0	3 5 0	2 4 0	3 4 0
Fabna	2 4 0	2 4 0	4 12 0	4 4 0	3 5 0	2 0 0	2 11 0
Sirajganj	2 4 0	2 4 0	4 12 0	4 4 0	3 5 0	2 0 0	2 11 0
Rangpur	2 0 0	2 0 0	3 10 0	4 0 0	2 1 0	1 12 0	2 14 0

Marts.	PADDY (COMMON QUALITY).						
	Present return.	Next preceding return.	Corresponding return of 1921.	Corresponding return of 1920.	Corresponding return of 1919.	Corresponding return of 1918.	Corresponding return of 1917.
	9	10	11	12	13	14	15
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Calcutta	2 5 0	2 5 0	3 0 0	4 2 0	3 0 0	2 4 0	2 10 0
Chokla Hat	2 5 0	2 5 0	3 0 0	4 1 0	3 0 0	1 10 0	2 2 0
Burdwan	2 5 0	2 5 0	3 0 0	4 1 0	3 0 0	1 10 0	2 2 0
Kalna	2 5 0	2 5 0	3 0 0	4 1 0	3 0 0	1 10 0	2 2 0
Raniganj	2 5 0	2 5 0	3 0 0	4 1 0	3 0 0	1 10 0	2 2 0
Midnapore	2 11 5	2 11 0	3 2 0	3 14 0	2 0 0	1 9 4	2 2 0
Chittagong	2 3 0	2 3 0	3 5 0	4 4 0	2 15 0	2 0 0	2 11 0
Chandpur	2 14 0	2 14 0	3 14 0	4 0 0	2 4 0	1 12 0	2 0 0
Dacca	2 14 0	2 14 0	3 14 0	4 0 0	2 4 0	1 12 0	2 0 0
Karayanganj	2 14 0	2 14 0	3 14 0	4 0 0	2 4 0	1 12 0	2 0 0
Mymensingh	2 14 0	2 14 0	3 14 0	4 0 0	2 4 0	1 12 0	2 0 0
Madaripur	2 14 0	2 14 0	3 14 0	4 0 0	2 4 0	1 12 0	2 0 0
Fabna	3 2 3	3 0 3	3 2 0	4 3 5	2 6 0	1 0 0	2 7 0
Sirajganj	3 2 3	3 0 3	3 2 0	4 3 5	2 6 0	1 0 0	2 7 0
Rangpur	2 4 0	2 4 0	3 2 0	3 0 0	2 4 0	1 0 0	2 2 0

(a) No sale.

**Wholesale prices-current of food-grains, salt, etc., in the under-mentioned parts of Bengal for the second-half of February 1922.**

Marka.	RICE (BEST QUALITY).						
	Present return.	Next preceding return.	Corresponding return of 1921.	Corresponding return of 1920.	Corresponding return of 1919.	Corresponding return of 1918.	Corresponding return of 1917.
	16	17	18	19	20	21	22
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Calcutta ...	5 0 0	5 0 0	5 0 0	10 0 0	3 0 0	6 0 0	7 0 0
Chitta Hat ...	...	...	...	...	...	...	...
Bardwan ...	5 5 0	5 5 0	10 0 0	7 4 0	7 6 0	6 0 0	7 0 0
Kalna ...	...	...	...	...	...	...	...
Baunguij ...	...	...	...	...	...	...	...
Midnapore ...	5 0 0	5 0 0	5 0 0	10 0 0	6 4 0	4 0 0	4 10 0
Chittagong ...	5 0 0	5 0 0	10 0 0	12 0 0	10 0 0	3 0 0	5 0 0
Chandpur ...	...	...	...	...	...	...	...
Dacca ...	5 10 0	5 12 0	5 5 0	7 0 0	8 4 0	4 0 0	5 0 0
Harayanganj ...	...	...	...	...	...	...	...
Mymensingh ...	...	...	...	...	...	...	...
Madaripur ...	...	...	...	...	...	...	...
Pabna ...	7 0 0	7 0 0	10 0 0	11 0 0	7 12 0	4 12 0	7 0 0
Sirajganj ...	...	...	...	...	...	...	...
Rangpur ...	5 4 0	5 4 0	5 0 0	7 0 0	5 4 0	5 0 0	5 0 0

Marka.	RICE (COMMON QUALITY).						
	Present return.	Next preceding return.	Corresponding return of 1921.	Corresponding return of 1920.	Corresponding return of 1919.	Corresponding return of 1918.	Corresponding return of 1917.
	23	24	25	26	27	28	29
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Calcutta ...	7 0 0	7 0 0	5 4 0	5 2 0	6 4 0	4 2 0	5 10 0
Chitta Hat ...	...	...	...	...	...	...	...
Bardwan ...	5 5 0	5 5 0	7 0 0	5 4 0	5 10 0	3 4 0	3 12 0
Kalna ...	...	...	...	...	...	...	...
Baunguij ...	...	...	...	...	...	...	...
Midnapore ...	5 5 0	5 4 0	5 0 0	6 12 0	5 2 0	3 0 0	4 4 0
Chittagong ...	5 3 0	5 2 0	4 5 0	7 0 0	5 2 0	2 5 0	4 4 0
Chandpur ...	...	...	...	...	...	...	...
Dacca ...	5 0 0	5 0 0	5 12 0	5 5 0	5 0 0	3 10 0	5 4 0
Harayanganj ...	...	...	...	...	...	...	...
Mymensingh ...	...	...	...	...	...	...	...
Madaripur ...	...	...	...	...	...	...	...
Pabna ...	5 10 0	5 10 0	7 2 0	7 0 0	5 11 0	2 4 0	4 10 0
Sirajganj ...	...	...	...	...	...	...	...
Rangpur ...	4 12 0	4 12 0	7 0 0	5 5 0	5 0 0	4 0 0	4 10 0



SUPPLEMENT TO THE CALCUTTA GAZETTE, MAR. 13, 1922. 175

Wholesale prices-current of food-grains, salt, etc., in the under-mentioned marts of Bengal for the second-half of February 1922.

## W. P. R. E.

[illegible]

### Kulhi Dal

[illegible]

**Wholesale prices-current of food-grains, salt, etc., in the under-mentioned marts of Bengal for the second-half of February 1922.**

Marts.	GRAM.						
	Present return.	Next preceding return.	Corresponding return of 1921.	Corresponding return of 1920.	Corresponding return of 1919.	Corresponding return of 1918.	Corresponding return of 1917.
	51	52	53	54	55	56	57
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Calcutta ...	5 12 0	5 12 0	6 0 0	5 4 0	5 0 0	4 0 0	2 10 0
Chokla Hat ...	...	...	...	...	...	...	...
Burdwan ...	3 8 0	to 3 12 0	4 12 0	7 4 0	3 5 0	3 0 0	3 14 0
Kalna ...	...	...	...	...	...	...	...
Raniganj ...	...	...	...	...	...	...	...
Midnapore ...	3 8 0	3 8 0	5 0 0	to 5 2 0	to 5 0 0	to 4 8 0	5 0 0
Chittagong ...	0 0 0	0 0 0	5 0 0	5 12 0	5 0 0	5 0 0	...
Chandpur ...	...	...	...	...	...	...	...
Dacca ...	3 0 0	3 0 0	5 8 0	5 12 0	...	...	...
Karayanganj ...	...	...	...	...	...	...	...
Mymensingh ...	...	...	...	...	...	...	...
Madaripur ...	...	...	...	...	...	...	...
Pabna ...	...	...	...	...	...	...	...
Sirajganj ...	...	...	...	...	...	...	...
Rangpur ...	...	...	...	...	...	...	...

Marts.	ARMAR DAL.						
	Present return.	Next preceding return.	Corresponding return of 1921.	Corresponding return of 1920.	Corresponding return of 1919.	Corresponding return of 1918.	Corresponding return of 1917.
	51	52	53	54	55	56	57
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Calcutta ...	5 8 0	5 8 0	5 4 0	5 2 0	7 12 0	5 0 0	4 12 0
Chokla Hat ...	...	...	...	...	...	...	...
Burdwan ...	10 8 0	10 0 0	5 0 0	2 8 0	13 0 0	4 5 0	4 5 0
Kalna ...	...	...	...	...	...	...	...
Raniganj ...	...	...	...	...	...	...	...
Midnapore ...	11 0 0	11 0 0	5 2 0	12 0 0	to 5 8 0	to 5 0 0	5 0 0
Chittagong ...	10 0 0	10 8 0	5 5 0	11 5 0	to 10 0 0	to 6 0 0	6 0 0
Chandpur ...	...	...	...	...	...	...	...
Dacca ...	3 2 0	3 0 0	2 0 0	12 0 0	3 0 0	5 0 0	5 0 0
Karayanganj ...	...	...	...	...	...	...	...
Mymensingh ...	...	...	...	...	...	...	...
Madaripur ...	...	...	...	...	...	...	...
Pabna ...	11 0 0	11 0 0	11 0 0	12 0 0	12 11 0	5 8 0	5 8 0
Sirajganj ...	...	...	...	...	...	...	...
Rangpur ...	5 8 0	5 0 0	15 0 0	(a)	10 0 0	5 0 0	7 8 0

(a) Not available.

**Wholesale prices-current of food-grains, salt, etc., in the under-mentioned marts of Bengal for the second-half of February 1922.**

Marts.	LINSEED.			MUSTARD.			GER.			COTTON (UNGINNED).		
	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
	63	59	49	61	62	62	64	65	64	67	68	69
Calcutta	Rs. A. P. 11 0 0	Rs. A. P. 11 0 0	Rs. A. P. 12 4 0	Rs. A. P. 10 0 0	Rs. A. P. 10 0 0	Rs. A. P. 12 0 0	Rs. A. P. 9 0 0	Rs. A. P. 10 0 0	Rs. A. P. 10 0 0	Rs. A. P. 22 0 0	Rs. A. P. 22 0 0	Rs. A. P. 25 0 0
Chella Hat	(a)	(a)	9 0 0	8 0 0	8 0 0	7 0 0	8 0 0	8 0 0	8 0 0	20 0 0	20 0 0	27 0 0
Burdwan	(a)	(a)	9 0 0	8 0 0	8 0 0	7 0 0	8 0 0	8 0 0	8 0 0	20 0 0	20 0 0	27 0 0
Kalna	(a)	(a)	9 0 0	8 0 0	8 0 0	7 0 0	8 0 0	8 0 0	8 0 0	20 0 0	20 0 0	27 0 0
Raniganj	(a)	(a)	9 0 0	8 0 0	8 0 0	7 0 0	8 0 0	8 0 0	8 0 0	20 0 0	20 0 0	27 0 0
Midnapore	8 0 0	8 0 0	7 4 0	8 0 0	8 0 0	7 0 0	8 0 0	8 0 0	10 0 0	12 0 0	12 0 0	12 0 0
Chittagong	11 0 0	10 0 0	10 0 0	8 0 0	8 0 0	7 0 0	8 0 0	8 0 0	8 0 0	12 0 0	12 0 0	12 0 0
Chandpur	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Dacca	7 0 0	6 0 0	6 0 0	6 0 0	6 0 0	6 0 0	6 0 0	6 0 0	11 0 0	(a)	(a)	(a)
Narayanganj	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Mymensingh	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Madaripur	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Patna	7 0 0	7 0 0	6 0 0	7 0 0	7 0 0	6 12 0	6 12 0	6 0 0	6 12 0	(a)	(a)	(a)
Sirajganj	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Rangpur	(a)	(a)	(a)	8 0 0	7 0 0	7 0 0	7 0 0	8 0 0	10 0 0	(a)	(a)	(a)

Marts.	JUTE.			GHEE.			HIDES (COW).		
	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
	70	71	72	73	74	75	76	77	78
Calcutta	Rs. A. P. (1) 13 0 0 (2) 12 0 0 (3) 7 0 0	Rs. A. P. (1) 12 0 0 (2) 12 0 0 (3) 7 12 0	Rs. A. P. (1) (n) (2) (n) (3) (n)	Rs. A. P. 30 0 0	Rs. A. P. 30 0 0	Rs. A. P. 30 0 0	Rs. A. P. 500 0 0	Rs. A. P. 500 0 0	Rs. A. P. 500 0 0
Chella Hat	(a)	(a)	7 0 0	8 0 0	8 0 0	70 0 0	75 0 0	20 0 0	20 0 0
Burdwan	(a)	(a)	7 0 0	8 0 0	8 0 0	70 0 0	75 0 0	20 0 0	20 0 0
Kalna	(a)	(a)	7 0 0	8 0 0	8 0 0	70 0 0	75 0 0	20 0 0	20 0 0
Raniganj	(a)	(a)	7 0 0	8 0 0	8 0 0	70 0 0	75 0 0	20 0 0	20 0 0
Midnapore	5 4 0	5 4 0	4 0 0	75 0 0	75 0 0	75 0 0	100 0 0	100 0 0	100 0 0
Chittagong	(a)	(a)	(a)	75 0 0	75 0 0	75 0 0	100 0 0	100 0 0	100 0 0
Chandpur	3 5 0	3 5 0	3 5 0	75 0 0	75 0 0	75 0 0	100 0 0	100 0 0	100 0 0
Dacca	3 5 0	3 5 0	3 5 0	75 0 0	75 0 0	75 0 0	100 0 0	100 0 0	100 0 0
Narayanganj	4 12 0	4 12 0	4 0 0	75 0 0	75 0 0	75 0 0	100 0 0	100 0 0	100 0 0
Mymensingh	5 0 0	5 0 0	5 0 0	75 0 0	75 0 0	75 0 0	100 0 0	100 0 0	100 0 0
Madaripur	3 0 0	3 0 0	3 0 0	75 0 0	75 0 0	75 0 0	100 0 0	100 0 0	100 0 0
Patna	3 0 0	3 0 0	3 0 0	75 0 0	75 0 0	75 0 0	100 0 0	100 0 0	100 0 0
Sirajganj	3 4 0	3 4 0	4 0 0	75 0 0	75 0 0	75 0 0	100 0 0	100 0 0	100 0 0
Rangpur	3 0 0	3 0 0	3 0 0	75 0 0	75 0 0	75 0 0	100 0 0	100 0 0	100 0 0

(a) Not available.

(1) "Price of fat trade."  
(2) "Price of district trade."  
(3) "Weighted average price."

**Wholesale prices-current of food-grains, salt, etc., in the under-mentioned parts of Bengal for the second-half of February 1922.**

Mark.	RICE.			SALT.			KEROSENE OIL.		
	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Calcutta ...	10 0 0	10 0 0	10 0 0	2 0 0	2 0 0	2 0 0	4 0 0(d)	4 0 0(d)	4 0 0(d)
Chittagong ...	...	...	...	...	...	...	...	...	...
Dacca ...	10 0 0	10 0 0	10 0 0	2 11 0	2 11 0	2 10 0	4 2 0(d)	4 2 0(d)	4 2 0(d)
Kolkata ...	...	...	...	...	...	...	...	...	...
Rangpur ...	...	...	...	...	...	...	...	...	...
Midnapore ...	2 0 0	2 0 0	2 0 0	2 14 0	2 14 0	2 13 0	4 2 0(d)	4 2 0(d)	4 4 0(d)
Chittagong ...	10 0 0	10 0 0	10 0 0	2 5 0	2 5 0	2 5 0	3 3 0(c)	3 4 0(c)	3 4 0(c)
Chandpur ...	...	...	...	...	...	...	...	...	...
Dacca ...	...	...	...	2 0 0	2 4 0	2 3 0	4 2 0(d)	4 3 0(d)	4 5 0(d)
Harayaganj ...	...	...	...	...	...	...	...	...	...
Mymensingh ...	...	...	...	...	...	...	...	...	...
Madaripur ...	...	...	...	...	...	...	...	...	...
Pabna ...	10 0 0	10 0 0	10 0 0	2 4 0	2 2 0	2 4 0	4 5 0(d)	4 5 0(d)	4 7 0(d)
Sirajganj ...	...	...	...	...	...	...	...	...	...
Rangpur ...	15 0 0	15 0 0	15 0 0	(n)	5 0 0	4 4 0	4 7 0(d)	4 7 0(d)	4 5 0(d)

(a) Monkey brand.

(b) Rising Sun.

(c) Mosque mark.

(d) Elephant.

(n) Not reported.

Mark.	MUSTARD OIL.			PINEWOOD.			COAL (BENGAL).		
	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
Calcutta ...	22 0 0	22 0 0	22 0 0	0 14 0	0 14 0	0 14 0	...	...	...
Chittagong ...	...	...	...	...	...	...	1 4 0	1 0 0	1 2 0
Dacca ...	25 0 0	25 0 0	25 0 0	0 10 0	0 10 0	0 8 0	...	0 10 0	0 14 0
Kolkata ...	...	...	...	...	...	...	1 1 0	1 3 0	0 13 0
Rangpur ...	...	...	...	...	...	...	0 5 0	0 5 0	0 5 0
Midnapore ...	24 0 0	24 0 0	21 0 0	0 7 0	0 7 0	0 7 0	...	...	...
Chittagong ...	24 0 0	24 0 0	24 0 0	...	...	...	...	...	...
Chandpur ...	...	...	...	...	...	...	...	...	...
Dacca ...	25 0 0	25 0 0	25 0 0	...	...	...	...	...	...
Harayaganj ...	...	...	...	...	...	...	...	...	...
Mymensingh ...	...	...	...	...	...	...	...	...	...
Madaripur ...	...	...	...	...	...	...	...	...	...
Pabna ...	25 0 0	25 0 0	25 0 0	...	...	...	...	...	...
Sirajganj ...	...	...	...	...	...	...	...	...	...
Rangpur ...	25 0 0	25 0 0	25 0 0	...	...	...	...	...	...

J. C. Roy,

for Director of Agriculture, Bengal.

Dacca, the 9th March 1922.

prices-current (retail) of food-grains, salt, etc., in the districts of Bengal for the second-half of February 1922.

Division. Number.	Districts and Mazars.	QUANTITY PER RUPEE IN SERIES OF EIGHTY TOLAS.															
		COMMON RICE.						KALAI DAL ( <i>Phaseolus</i> <i>radiatus</i> ).			ARHAR (DAL) OR TUR. CADJAN PEA ( <i>Cajanus</i> <i>indicus</i> ).			SALT.			
		Average.			Onespot.			Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.										
PRESIDENCY.	24-PANAGARAN.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.
	1 Uthala Hat ...	5 8	5 8	5 5	7 0	7 0	6 7	5 8	5 8	5 8	4 7	4 0	4 9	11 0	11 0	12 8	
	2 Mahra Hat ...	7 4	6 15	6 10	7 10	7 8	7 0	(a)	(a)	(a)	3 12	3 12	4 4	13 5	15 2	13 0	
	3 Calcutta-Bellaghata ...	5 5	5 5	4 13	7 8	7 5	7 4	6 2	6 2	5 8	4 7	4 7	4 5	10 0	10 0	13 0	
	KADIA.																
	4 Goari ...	6 15	6 15	6 10	8 5	8 0	7 4	4 5	4 6	4 0	4 5	4 5	4 0	13 5	13 5	12 12	
	5 Hanshat ...	6 8	6 0	6 0	7 0	7 0	7 0	4 5	4 5	5 0	4 5	4 5	4 5	10 5	10 5	10 5	
	MURSHIDABAD.																
	6 Berhampur ...	6 5	7 8	6 12	7 4	7 2	7 0	6 0	6 0	6 0	5 0	5 0	5 0	13 0	13 0	13 0	
	7 Kandi ...	7 12	7 12	7 8	8 0	7 10	6 0	5 0	(a)	5 0	4 3	5 2	5 8	12 0	12 0	13 0	
	8 Jangipur ...	7 0	7 0	7 0	7 4	7 0	7 8	5 5	5 0	6 2	4 3	4 5	4 0	13 0	12 0	13 0	
BURDWAR.	JESSORE.																
	9 Sadar ...	5 0	7 0	6 0	8 5	8 0	7 0	3 4	3 4	4 0	3 5	3 4	4 0	14 0	12 4	14 12	
	10 Bangaon ...	7 5	7 4	6 2	8 4	8 0	7 4	4 0	4 0	4 0	4 0	4 0	4 0	12 5	12 5	12 12	
	KHULNA.																
	11 Sadar ...	6 0	6 0	7 0	8 4	8 4	7 0	4 5	4 0	4 5	3 12	3 12	4 5	10 5	10 5	10 5	
	12 Bagerhat ...	6 0	7 5	7 0	9 0	8 0	8 0	5 0	5 0	5 0	3 2	3 0	3 2	10 0	10 0	11 4	
	BORDWAN.																
	13 Sadar ...	5 5	7 3	6 5	6 5	8 4	6 12	4 0	5 5	6 0	4 0	3 5	5 0	12 12	12 12	13 0	
	14 Kalna ...	6 10	6 8	6 10	7 1	7 0	6 12	6 2	6 12	5 12	5 10	5 11	4 5	13 4	13 4	10 5	
	BIRBHUM.																
	15 Sadar ...	6 8	6 0	6 12	7 0	6 12	7 2	5 0	4 5	5 0	4 0	4 0	4 4	13 0	13 0	13 0	
	16 Rampur Hat ...	6 12	7 0	7 0	7 0	7 5	8 0	5 3	5 0	7 0	4 0	4 0	4 0	11 0	11 0	13 0	
RAJSHAHI.	HANKURA.																
	17 Sadar ...	7 0	7 0	7 5	7 4	7 5	8 0	5 5	5 5	7 5	4 0	4 0	5 4	12 0	12 0	13 0	
	18 Vidhansapur ...	6 5	6 4	6 4	6 12	7 0	5 12	5 0	5 4	6 4	3 5	4 0	4 0	13 0	13 0	13 0	
	MIDNAPUR.																
	19 Sadar ...	7 5	7 11	6 11	8 1	8 1	7 0	4 5	4 5	5 4	3 4	3 4	4 0	13 5	10 5	11 0	
	20 Contal ...	3 5	6 5	6 5	8 5	8 5	7 0	4 0	4 0	4 0	3 5	3 5	3 5	10 0	10 0	10 5	
	MOOCHLY.																
	21 Sadar ...	5 5	5 5	5 5	6 0	7 5	8 2	5 0	5 0	5 4	4 4	5 0	5 0	13 0	13 0	13 0	
	22 Arambagh ...	6 10	6 15	5 11	8 0	8 0	6 10	7 0	7 0	7 5	3 0	3 0	3 5	10 5	10 5	10 5	
	HOWRAH.																
	23 Sadar ...	5 10	5 4	5 8	6 5	7 5	7 0	4 5	4 5	5 0	4 0	3 5	5 0	11 0	12 0	12 5	
	24 Usharia ...	6 12	6 12	5 12	7 12	7 12	8 5	8 10	5 0	5 0	4 0	4 0	4 5	13 4	16 0	14 5	
RAJSHAHI.	RAJSHAHI.																
	25 Rampur-Baalia ...	7 5	7 2	6 12	8 4	7 5	7 0	7 5	7 5	5 5	4 13	4 2	5 4	12 0	13 5	12 0	
	26 Nator ...	7 5	7 5	7 4	8 5	8 5	7 10	4 14	4 14	4 5	3 0	3 0	4 5	(a)	(a)	10 0	
	27 Dinajpur-Railway Gadar Hat.	7 12	7 12	6 14	8 1	8 1	7 5	5 5	5 5	4 13	3 13	3 13	4 13	(a)	(a)	10 0	
	28 Jaipalguri-Sadar ...	5 5	7 4	5 5	8 0	8 0	7 5	5 5	5 5	4 5	4 0	4 0	4 5	10 5	10 5	11 0	

\* Karkalah.

(a) Not available.

**Prices-current (retail) of food-grains, salt, etc., in the districts of Bengal for the second-half of February 1922—consolid.**

Division.	District and Market.	QUANTITY PER RUPEE IN SEER OF EIGHTY TOLAS.														
		COMMON RICE.						KALAI DAL (Phaseolus radiatus).			ARHAR (DAL) OR TURU LADJAN PEA (Cajanus indicus).			SALT.		
		Average.			Cheapest.			Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.									
Number.		S. OH.	S. CH.	S. CU.	S. OH.	S. CH.	S. CU.	S. OH.	S. CH.	S. CU.	S. OH.	S. CH.	S. CU.	S. OH.	S. CH.	S. CU.
<b>DARJEELING.</b>																
29	Sadar ...	5 4	5 4	5 2	6 4	6 4	6 12	3 4	5 4	5 0	3 4	3 4	4 0	3 0	3 0	3 0
30	Biligori ...	6 0	6 0	6 0	7 0	7 0	7 0	4 0	4 0	4 0	4 0	4 0	4 0	3 0	3 0	3 0
<b>RANGPUR.</b>																
31	Sadar ...	3 0	3 0	3 0	3 3	3 3	3 3	4 3	4 3	4 3	4 3	4 3	4 3	3 3	3 0	3 0
32	Nilphamari ...	3 0	3 4	7 0	(a)	(a)	7 3	4 0	4 0	4 3	4 0	4 0	4 3	10 3	10 0	11 0
33	Bages-Sadar ...	6 0	6 0	6 12	5 4	7 14	7 2	4 0	4 0	3 15	4 0	4 0	3 15	3 12	3 12	12 3
<b>PAHNA.</b>																
34	Sadar ...	7 0	7 0	6 0	7 4	7 4	7 0	6 0	6 0	6 3	3 3	3 3	3 3	10 12	10 12	13 0
35	Shreeganj ...	7 0	7 0	6 0	7 3	7 3	6 0	5 3	5 3	6 0	4 4	4 4	4 3	9 0	9 0	10 0
<b>MAIDA.</b>																
36	Sadar ...	7 4	7 4	7 3	7 3	7 3	7 12	7 0	6 0	6 0	4 0	4 0	5 3	12 0	12 0	14 0
37	Baka-Nawabganj ...	7 12	7 3	7 12	8 0	8 0	8 4	7 0	6 3	3 0	4 3	4 3	6 0	12 0	12 0	14 0
<b>DACCA.</b>																
38	Sadar ...	7 3	7 3	3 0	3 0	3 0	3 3	3 3	10 0	6 4	4 3	3 0	4 3	10 0	9 0	11 3
39	Mirshadim ...	7 3	7 4	7 3	3 3	3 4	7 3	(a)	(a)	(a)	(a)	(a)	(a)	14 0	14 0	13 4
<b>MYMENSINGH.</b>																
40	Nasirabad ...	6 3	6 3	5 3	7 4	7 4	6 3	2 4	2 5	4 0	3 3	3 0	4 0	10 0	10 3	11 4
41	Netrakona ...	7 4	7 2	7 0	3 0	3 0	7 4	4 0	4 0	4 0	4 0	4 0	4 0	9 0	9 0	10 0
<b>PANOSPOR.</b>																
42	Sadar ...	6 0	3 0	6 4	4 4	6 4	7 3	3 3	5 3	7 0	3 3	3 3	3 4	10 0	10 0	12 12
43	Rajbari ...	7 4	7 4	6 5	7 3	7 3	6 12	5 3	5 3	5 5	4 0	4 0	4 0	12 0	12 0	12 0
<b>BAKARGANJ.</b>																
44	Barisal ...	7 11	5 3	3 3	5 10	3 0	(7 3) (6 10)	5 0	6 0	6 0	3 3	3 3	4 0	(13 4) (11 3)	12 4	13 4
45	Firojpur ...	3 4	7 3	5 12	3 12	7 12	6 14	6 0	6 0	5 5	(a)	(a)	(a)	10 0	10 0	9 0
<b>TIPPERA.</b>																
46	Oumila ...	7 9	7 10	5 10	3 0	3 0	6 13	4 3	3 0	5 5	3 3	3 3	4 0	12 3	13 3	13 3
47	Chandpur ...	7 10	7 3	6 14	3 14	3 14	3 10	4 10	4 10	5 3	3 12	4 0	4 3	10 3	10 3	10 4
<b>NOAKHALI.</b>																
48	Kahtara Hat ...	7 3	7 3	6 12	3 0	3 0	7 0	3 3	3 3	7 0	(c)	(c)	3 3	14 0	14 0	12 3
49	Feni Hat ...	3 4	3 4	6 15	3 12	3 12	7 3	4 0	4 0	4 0	(c)	(c)	(a)	12 0	12 0	12 0
<b>CHITTAGONG.</b>																
50	Sadar ...	7 3	7 4	6 3	3 0	3 0	7 0	3 0	3 0	—	4 0	4 0	4 12	16 0	16 0	14 0
51	Cox's Bazar ...	3 0	7 0	6 0	(c)	(c)	(a)	3 3	3 3	3 3	3 3	3 3	3 0	3 3	3 3	3 3
52	Chittagong Tracie-Bangamati ...	7 0	7 0	7 0	3 0	3 0	7 3	3 4	3 4	4 0	3 4	3 4	3 3	11 3	11 3	9 0

\* Kerkabul.

(a) Not available.

(b) Burma rice.

(c) No min.

(d) Not reported.

J. C. Roy,  
for Director of Agriculture, Bengal.

DACCA, the 21st March 1922.

## DISTRICT REPORTS ON WEATHER AND CROPS

For the week ending on the 8th March 1922.

**Summary.**—The weather is continuing dry. Harvesting of spring crops is in progress. The continued absence of rain is retarding the preparation of land for jute and other autumn crops. Sowings are being delayed and the growth of standing crops is being affected. The average price of common rice has slightly risen as compared with that of the previous week.

Serial No.	District and subdivision.	Rain fall.	PRICE OF COMMON RICE, IN SERIES, PER RUPEE.		Character of the weather, condition of crops, etc.
			This week.	Previous week.	
1		Inches.			
1	24-PARGANAS	Nil	5½	5½	Lands are being prepared for jute and aus paddy. Effect of weather on the crops is good. Fodder and water are sufficient.
	Diamond Harbour.	Nil	6½	7½	
	Barrackpore	Nil	6½	6½	
	Barasat ...	Nil	6½	6½	
	Basirhat ...	Nil	7½	6½	
2	NADIA ...	Nil	7½	7	Harvesting of rabi crops continues. Rain is wanted for ploughing. Cattle disease is reported from Chakdah, Ranaghat, Karimpur and Nabadwip thanas.
	Kushtia ...	Nil	6½	6½	
	Meherpur ...	Nil	7½	7½	
	Ohuadanga ...	Nil	7½	7½	
	Ranaghat ...	Nil	6½	6½	
3	MURSHIDABAD	Nil	7	7½	Prospects of standing crops are fair. Fodder is sufficient. No large import and export of rice.
	Lalbagh ...	Nil	7	7	
	Jangipur ...	Nil	7½	7½	
	Kandi ...	Nil	8	8	
4	JESSORE ...	Nil	8	8½	Weather reasonable. Harvesting of rabi crops continues. Prospects of standing crops are not favourable for want of rain. Export of paddy is reported from Bongaon and Jhenidah subdivisions. Fodder is sufficient. Scarcity of drinking water is beginning to be felt.
	Jhenidah ...	Nil	9	9	
	Magura ...	Nil	9	9	
	Narail ...	Nil	9	9	
	Bongaon ...	Nil	8½	8½	
5	KHULNA ...	Nil	8	8	Want of rain is retarding the agricultural operations. Scarcity of drinking water is beginning to be felt in some places.
	Satkhira ...	Nil	8	8	
	Bagerhat ...	Nil	8	(n)	

(n) Not reported.



Serial No.	District and subdivision.	Rainfall.	PRICE OF COMMON RICE, IN RUPEES, PER MUPHUR.		Character of the weather, condition of crops, etc.
			This week.	Previous week.	
1	2	3	4	5	6
		Inches.			
6	BURDWAN ...	Nil	6½	6	Weather is cool. Threshing of winter paddy and pressing of sugarcane are continuing. Standing crops are doing well.
	Asansol ...	(n)	(n)	5½	
	Katwa ...	Nil	6½	6½	
	Kalna ...	Nil	6½	6½	
7	BIRBHUM ...	Nil	6½	6½	Condition of standing crops is fair. Fodder and water are sufficient.
	Rampurhat...	Nil	6½	6½	
8	BANKURA ...	Nil	7	7	Export of rice and paddy continues. Pressing of sugarcane is in progress.
	Vishnupur...	Nil	6½	7	
9	MIDNAPORE	Nil	7½	7½	Rain is wanted for ploughing. Harvesting of rabi crops is in progress. Fodder is sufficient.
	Jhargram ...	(n)	7	7	
	Ghatal ...	Nil	7½	7½	
	Tamluk ...	Nil	7½	7½	
	Contai ...	Nil	8½	8½	
10	HOOGHLY ...	Nil	5½	5	Effect of weather is unfavourable. Rain is urgently needed. Fodder is sufficient.
	Serampore...	Nil	6½	6½	
	Arambagh ...	Nil	6½	6½	
11	HOWRAH ...	(n)	(n)	(n)	Report not received.
	Uluberia ...	(n)	(n)	(n)	
12	RAJSHAHI (RAMPUR-BOALIA).	Nil	7	7	Rain is needed. Condition of standing crops is fair. Fodder and water are sufficient.
	Naogaon ...	Nil	7½	7½	
	Nator ...	Nil	7½	7½	
13	DINAJPUR ..	Nil	8½	8½	Harvesting of rabi crops is going on. Fodder and water are sufficient.
	Thakurgaon	(n)	9	7	
	Balurghat ...	(n)	7½	7½	
14	JALPAIGURI	Nil	8	7	The weather is favourable for the preparation of fields for jute and bhadoi paddy. Harvesting of tobacco has commenced; the outturn is expected to be normal.
	Alipur ...	Nil	8	8	

(n) Not reported.

Serial No.	District and subdivision.	Rainfall.	PRICE OF COMMON RICE, IN SEER, PER RUPEE.		Character of the weather, condition of crops, &c.
			This week.	Previous week.	
1	2	3	4	5	6
		Inches.			
15	DARJEELING	Nil	4½	4½	Sowing of maize is in progress. Fodder and water are sufficient.
	Kurseong ...	Nil	6½	6½	
	Siliguri ...	Nil	7½	7½	
	Kalimpong...	(n)	(n)	6	
16	RANGPUR ...	Nil	8	8½	The condition of standing crops is good. Fodder and water are sufficient.
	Nilphamari	Nil	9	9	
	Kurigram ...	Nil	9	8½	
	Gaibandha ...	Nil	8	7½	
17	BOGRA ...	Nil	8½	8½	Ploughing of lands for sugarcane, jute and aus paddy are going on. Rain is necessary.
18	PABNA ...	Nil	6½	7	Prospects of standing crops are fair. Rain is badly needed for the preparation of lands for aus paddy and jute. Pressing of sugarcane is in progress. Fodder is sufficient.
	Sirajganj ...	Nil	7	7	
19	MALDA ...	Nil	7½	7½	Weather reasonable. Transplantation of boro paddy continues. Harvesting of rabi crops continues. Fodder and water are sufficient.
20	COOCH BEHAR	Nil	8½	9½	Weather reasonable. Condition of standing crop is favourable. Harvesting of <i>haimanti</i> paddy has been finished and the outturn estimated at 15 annas.
21	DACCA ...	Nil	6½	6½	Weather is not reasonable. Rain is badly wanted for the growth of standing crops. Harvesting of barley has commenced. Cattle-disease is reported from Narayanganj subdivision.
	Manikganj...	Nil	8	8	
	Narayanganj	Nil	8	8	
	Munshiganj (a)	(n)	7½	(n)	
22	MYMENSINGH	Nil	7	7½	Weather cool and dry. Harvesting of rabi crops is nearly finished. Preparation of soil for jute and paddy continues. Rain is badly needed. Prospects of boro are not good in Kishoreganj for want of water. Cattle-disease and deaths reported from Sherpur, Barhatta and Atpara. Fodder is available. Scarcity of water is apprehended at Kishoreganj.
	Jamalpur ...	Nil	8½	8	
	Tangail ...	Nil	7½	7½	
	Netrakona ...	0·01	7½	8	
	Kishoreganj...	Nil	7½	8	

(a) Munshiganj being very near to Dacca and Narayanganj, its rainfall statistics are not quoted. To give information regarding the northern part of the district, rainfall figures for Kapasia thana are reported here.

(n) Not reported.

Serial No.	District and subdivision.	Rainfall.	PACES OF COMMON RICE, IN SERIES, PER RUPEE.		Character of the weather, condition of crops, etc.
			This week.	Previous week.	
1	2	3	4	5	6
		Inches.			
23	FARIDPUR ...	Nil	{ 8 7* }	{ 8 7* }	Cultivation of lands for jute and paddy is continuing; rain is urgently wanted. State and prospects of standing crops are favourable. Fodder is sufficient.
	Goalundo ... (Rajbari).	Nil	7½	7½	
	Madaripur ...	Nil	9	9	
	Gopalganj(a)	Nil	9	(n)	
24	BAKARGANJ (BARISAL).	Nil	8	8½	Weather dry. Prospects of standing crops are fair. Fodder and water are sufficient.
	Pirojpur ...	Nil	8½	8½	
	Patuakhali...	Nil	7½	8	
	Dakshin Sha- bazpur (Bhola).	Nil	7½	7½	
25	CHITTAGONG	Nil	{ 7½ 6½* }	{ 7½ 6½* }	Cultivation of paddy crops has commenced. Prospects of standing crops are fair. Fodder is sufficient. Panga salt is selling at 9 and 9½ seers per rupee at Sadar and Cox's Bazar, respectively.
	Cox's Bazar	Nil	7	8	
26	TIPPERA ... (COMILLA).	Nil	7½	7½	Weather dry. Rabi crops are withering for want of rain; prospects are not good.
	Brahman- baria.	Nil	6½	7½	
	Chandpur ...	Nil	7½	8	
27	NOAKHALI ...	Nil	7½	7½	Weather reasonable. Rain is badly wanted. Fodder and water are sufficient.
	Feni ...	Nil	8½	8½	
28	CHITTAGONG HILL TRACTS.	Nil	(n)	(n)	Condition and prospects of rabi crops are unfavourable. Jhum cultivation has begun.
29	TRIPURA STATE.	2.25	8	7	Weather reasonable. Prospects of standing crops are fair excepting four divisions. Jute is selling at Rs. 4½ to Rs. 5 per maund and cleaned cotton at Rs. 12½ to Rs. 15. Fodder and water are sufficient. Cattle-disease is reported from three subdivisions.

\* Barma rice.

(a) The rainfall at Haridaspur which is very near to Gopalganj is shown here.

(n) Not reported.

Dacca, the 11th March 1922.

G. EVANS,  
Director of Agriculture, Bengal

**List of prices of articles of food at Calcutta during the week ending Saturday, the 11th March 1922.**

Names of articles.	WHOLESALE PRICE PER MAUND.		RETAIL PRICE PER SEER.	
	From—	To—	From—	To—
Rice—	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Balam, coarse ...	6 6 0	6 12 0	0 2 9	0 3 0
" medium ...	7 8 0	8 0 0	0 3 0	0 3 3
Patnai coarse ...	6 4 0	.....	0 2 9	.....
" medium ...	7 4 0	.....	0 3 0	.....
Nagra, coarse ...	7 4 0	.....	0 2 9	.....
" medium ...	7 12 0	.....	0 3 0	.....
Dudhkalma ...	7 8 0	.....	0 3 0	.....
Rangoon Boiled	.....	.....	0 2 6	.....
Kajia ...	.....	.....	0 2 3	.....
Wheat, Dudhia ...	9 14 0	.....	.....	.....
" Jamali ...	7 12 0	8 6 0	.....	.....
Gram, Patnai (whole)	9 0 0	.....	0 4 0	.....
" dal ...	11 8 0	12 0 0	0 5 0	.....
Mung " (Hari) ...	8 0 0	8 4 0	0 4 0	0 5 0
" " (Krishna) ...	7 4 0	.....	0 5 0	.....
Arhar " ...	8 0 0	11 8 0	0 5 6	0 4 0
Masur " (split) ...	5 8 0	.....	0 2 6	0 2 9
" " (Khanri) ...	8 12 0	9 0 0	0 4 0	.....
Kalai " ...	6 12 0	.....	0 3 0	.....
Salt ...	2 5 6	2 7 0	0 1 3	0 1 6
Sugar (Brown Java)	13 8 0	13 14 0	0 6 6	0 7 0
Gur, Bheli ...	.....	.....	0 5 0	.....
" Bhursut ...	.....	.....	0 4 0	.....
Milk ...	1 8 0	9 0 0	0 6 0	.....
Mustard Oil ...	22 0 0	25 0 0	0 11 0	0 13 0
Flour (Country) ...	9 8 0	.....	0 4 6	0 5 0
Atta No. 3 ...	7 2 0	.....	0 3 6	0 4 0
" " 2½ ...	7 9 0	.....	.....	.....
" " B ...	10 0 0	11 0 0	0 5 0	.....
Suji ...	10 8 0	.....	.....	.....
Ghee (Bhadwa, Matki, etc.)	85 0 0	.....	.....	.....
" [Patiram, Khurja, Ruto,	78 0 0	79 0 0	1 15 0	2 4 0
Etwa (better kind), etc.]	.....	.....	.....	.....
(Lalli, Etwa, Sagar, etc.)	62 0 0	64 0 0	.....	.....
Maize ...	5 0 0	.....	.....	.....
Potatoes ...	3 4 0	4 8 0	0 2 0	0 2 6
Patal ...	.....	.....	0 14 0	1 0 0
Brinjal ...	.....	.....	0 1 6	0 2 0
Onion ...	4 12 0	5 0 0	0 2 0	0 2 6
Fish, Rahu ...	15 0 0	18 0 0	0 12 0	.....
Mutton (2nd class) ...	.....	.....	1 0 0	1 4 0
Beef (2nd and 3rd classes)	.....	.....	0 5 0	0 8 0

N.B.—This is an abstract for price of the following markets :—

Wholesale.—Chetla Hat, Ramkrishnapur Hat, Sealdah Fish and Milk Markets and Posta Bazar.

Retail.—Sir Stuart Hogg Market, Orphananj Market, Sova Bazar, Nutun Bazar, Raja Babu's Bazar, Karaya Bazar, Taltola Bazar, Mullick Bazar and Jogu Babu's Bazar.

H. L. MUKHARJI,

for Commissioner, Presidency Division.

CALCUTTA, the 11th March 1922.

## Vital Statistics for the month of September 1921 of the Districts

Division.	No.	District.	POPULATION UNDER REGISTRATION ACCORDING TO CENSUS OF 1911.			BIRTHS REGISTERED.		DEATHS							
			Male.	Female.	Total.	Number registered (excluding still-births).	Still-born number registered.	Cholera.	Small-pox.	Plague.	Malaria.	Enteric fever.	Measles.	Relapsing fever.	Other.
Bardham	1	Bardham ...	726,364	726,740	1,453,104	2,442	16	40	...	...	2,368	1	...	...	...
	2	Birbhum ...	463,626	471,426	935,052	1,486	21	21	1	...	1,464	...	...	...	...
	3	Bankura ...	634,186	647,314	1,281,500	1,310	1	63	...	...	900	...	...	1	35
	4	Midnapur ...	1,306,391	1,306,478	2,612,869	4,423	107	35	81	...	1,847	184	1	61	4
	5	Hooghly ...	661,366	664,739	1,326,105	1,613	64	27	...	...	1,563	10	...	...	...
	6	Howrah ...	866,526	872,184	1,738,710	1,547	7	23	...	...	378	...	...	...	...
Presidency	7	24-Parganas ...	1,084,709	941,609	1,946,318	2,514	18	37	11	...	2,325	140	27	6	11
	8	Nadia ...	763,694	773,389	1,537,083	2,065	79	1	2	...	2,063	...	...	...	...
	9	Murshidabad ...	686,301	667,768	1,354,069	1,330	146	45	14	...	2,330	...	...	...	...
	10	Jessore ...	907,084	657,173	1,564,257	1,067	216	11	3	...	2,073	1	...	...	...
	11	Khulna ...	636,784	647,074	1,283,858	2,021	104	86	...	...	1,796	...	...	...	...
	12	Rajshahi ...	749,149	716,983	1,466,132	2,616	238	189	...	...	2,388	...	...	...	...
Rajshahi	13	Dinajpur ...	680,216	761,480	1,441,696	2,841	144	...	10	...	2,644	2	...	7	...
	14	Jalpaiguri ...	662,681	606,314	1,268,995	2,179	173	3	6	...	1,671	...	...	...	...
	15	Darjeeling ...	120,463	116,062	236,525	703	80	...	...	...	297	...	...	3	...
	16	Rangpur ...	1,344,308	1,124,499	2,468,807	4,320	803	20	5	...	2,197	...	1	66	...
	17	Bogra ...	602,536	481,041	1,083,577	2,303	113	191	4	...	1,891	21	...	...	...
	18	Pabna ...	700,399	664,336	1,364,735	1,791	140	87	...	...	2,004	...	...	...	...
Dacca	19	Maldah ...	676,798	488,787	1,165,585	2,250	37	...	7	...	1,401	...	...	...	...
	20	Dacca ...	1,846,841	1,428,114	3,274,955	5,100	881	66	7	...	1,960	...	...	...	...
	21	Mymensingh ...	2,274,481	2,126,477	4,400,958	6,629	603	411	80	...	1,947	39	11	126	10
	22	Faridpur ...	1,068,396	1,023,317	2,091,713	2,719	165	32	...	...	2,276	6	...	...	...
	23	Baharganj ...	1,239,634	1,171,618	2,411,252	4,206	189	2	...	...	250	70	10	10	...
	24	Chittagong ...	704,066	726,609	1,430,675	2,379	221	...	19	...	252	18	...	23	...
Chittagong	25	Nonkhali ...	646,398	654,192	1,300,590	2,007	229	...	...	...	441	...	...	...	...
	26	Tippara ...	1,396,641	1,163,792	2,560,433	2,826	819	17	13	...	228	...	...	...	...
	27	Chittagong Town.	...	...	...	...	...	...	...	...	...	...	...	...	...
Total of month for Bengal ...			21,840,566	21,060,130	42,900,696	76,645	4,169	1,543	123	...	44,821	461	95	264	86
Total of corresponding month of previous year.			...	...	...	58,696	4,622	...	...	...	...	...	...	...	...
Increase + or decrease —			...	...	...	- 5,431	- 354	...	...	...	...	...	...	...	...

REMARKS—1. The above table is compiled from returns collected by the thana officers and submitted to the Director of Public Health by the Civil Surgeon.  
 2. The vital statistics of municipalities with a population of less than 10,000 have been included in this statement with those of the respective Districts.  
 3. Divisional totals and the birth and death rates per 1,000 per annum have been omitted from the statement according to the Government of India.  
 4. Figures for the different diseases are not available for the corresponding month of the previous year.

CALCUTTA,  
 The 31st March 1922.

excluding Towns with a population of 10,000 and over in Bengal.

REPRINTED.

Urban Areas.	Dynamite.	Marble.	Indian.	Provisional.	Flammable.	Other respiratory diseases.	Injuries included in the schedule.	Deaths from childbirth.	Other causes.	Total of all causes.			Total of corresponding month of previous year.			No.	Districts.
										Male.	Female.	Total.	Male.	Female.	Total.		
184	69	18	9	25	...	14	63	...	483	1,308	1,087	2,395	1,402	1,343	2,745	1	Burdwan.
1	3	8	...	13	...	2	31	1	210	1,012	677	1,689	1,130	1,114	2,244	2	Birbhum.
331	46	49	...	30	1	12	40	7	364	1,307	1,231	2,538	1,231	1,120	2,351	3	Bankura.
1,538	125	58	31	50	30	18	123	3	736	2,453	2,300	4,753	2,024	2,740	4,764	4	Midnapur.
320	31	27	2	12	12	8	60	...	122	1,000	1,038	2,038	1,214	1,112	2,326	5	Hoojly.
383	123	66	...	18	10	51	51	16	380	763	670	1,433	804	767	1,571	6	Howrah.
1,016	59	31	...	27	7	31	145	13	403	2,367	2,029	4,396	2,620	2,471	5,091	7	24 Parganas.
120	0	...	3	...	1	2	66	...	436	1,263	1,512	2,775	1,003	1,350	2,353	8	Radia.
88	17	2	...	3	...	4	92	6	402	1,672	1,491	3,163	1,622	1,486	3,108	9	Murshidabad.
32	2	4	1	22	9	2	102	...	304	1,437	1,473	2,910	1,710	1,620	3,330	10	Jessore.
120	4	1	...	2	2	2	78	17	649	1,244	1,234	2,478	1,030	1,070	2,100	11	Khulna.
...	2	...	...	...	...	1	106	1	272	2,164	2,004	4,168	2,130	2,301	4,431	12	Rajshahi.
421	4	1	...	0	2	...	72	0	121	2,276	2,124	4,400	2,264	2,130	4,394	13	Dinajpur.
...	24	1	...	6	7	17	30	5	144	322	244	566	2,049	275	2,324	14	Jaipur.
320	21	2	...	...	...	11	3	...	144	422	422	844	572	554	1,126	15	Darjeeling.
1,755	4	1	2	1	2	7	83	12	143	2,243	2,021	4,264	2,422	2,220	4,642	16	Rangpur.
631	25	4	26	17	1	2	45	4	102	1,666	1,232	2,898	1,621	1,003	2,624	17	Bogra.
...	2	...	...	...	...	...	64	9	106	1,227	1,004	2,231	1,406	1,191	2,597	18	Fabga.
60	...	...	...	...	...	2	37	...	201	811	702	1,513	824	772	1,596	19	Malda.
1,634	122	3	...	9	...	9	79	2	600	2,470	2,220	4,690	2,310	2,020	4,330	20	Dacca.
1,444	71	30	4	22	21	24	102	20	1,070	2,226	2,400	4,626	2,422	2,014	4,436	21	Mymensingh.
32	24	3	...	...	...	70	57	...	315	2,022	1,724	3,746	2,015	2,403	4,418	22	Faridpur.
1,904	46	11	...	16	...	4	120	...	501	2,006	1,872	3,878	2,422	2,422	4,844	23	Bakerganj.
1,742	8	8	...	1	...	1	90	4	57	1,190	1,156	2,346	1,255	1,436	2,691	24	Chittagong.
1,092	4	...	...	...	...	...	106	...	164	991	806	1,797	1,490	1,490	2,980	25	Noakhali.
7,055	31	...	...	...	...	4	101	...	442	1,961	1,320	3,281	1,840	1,654	3,494	26	Tippah.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	27	Chittagong Hill Tracts.
Registration.																	
28,440	1,044	334	150	574	101	165	1,080	140	9,230	42,536	38,795	81,331	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	47,571	42,917	90,488	47,571	42,917	90,488	...	...
...	...	...	...	...	...	...	...	...	...	4,303	5,122	9,425	...	...	...	...	...

Surgeons. Taken as a whole, the statement possesses a relative value, although the figures for individual districts probably only approximate to the actual. Statistics as ordered by Government of Bengal, Municipal Department, letter No. 1188, dated the 26th February 1922. India, Education Department, letter No. 23, dated the 21st March 1922.

CHAS. A. BENTLEY,  
Director of Public Health, Bengal.

## Vital Statistics for the month of September 1921 of the

District.	No.	Town.	POPULATION UNDER REGISTRATION ACCORDING TO CENSUS OF 1911.			BIRTHS REGISTERED.									
			Male.	Female.	Total.	Number registered (excluding still-births).	Still-born number registered.	Cholera.	Small-pox.	Plague.	Malaria.	Enteric fever.	Measles.	Infantile tetanus.	Kala-azar.
Burdwan	1	Burdwan	20,427	16,334	36,761	22	—	—	1	—	—	—	—	—	—
	2	Baughan	8,419	7,080	15,497	25	—	—	—	—	—	—	—	—	—
	3	Amanol	12,456	8,433	20,889	42	3	—	—	—	—	1	—	—	1
Bankura	4	Bankura	12,164	11,227	23,391	23	—	1	—	—	—	—	—	—	—
	5	Vishnupur	10,022	10,435	20,457	23	—	4	—	—	—	17	—	—	—
	6	Sonamukhi	8,364	7,021	15,385	12	—	9	—	—	—	12	1	—	—
Midnapur	7	Midnapur	17,877	16,140	34,017	26	3	1	—	—	—	1	—	—	—
	8	Chital	6,214	6,342	12,556	24	—	—	—	—	—	2	—	—	—
Hooghly	9	Hooghly-Chinsura	12,817	12,000	24,817	61	2	4	—	—	—	12	—	—	—
	10	Baranagar	12,629	12,420	25,049	29	1	3	—	—	—	—	—	—	—
	11	Habra-Bansagar	10,724	9,720	20,444	26	—	2	—	—	—	2	—	—	—
	12	Kaldyabati	Statistics not available			20	—	1	—	—	—	12	—	—	—
	13	Shadrowar				9	—	—	—	—	—	10	—	—	—
Howrah	14	Chandpur				20	2	—	—	—	—	—	—	—	—
	15	Howrah	114,822	84,500	199,322	175	30	14	3	—	—	20	2	—	—
	16	Dally	24,217	6,177	30,394	28	—	—	—	—	—	16	1	—	—
	17	Goodpur-Chilpur	20,722	17,222	37,944	76	5	—	—	—	—	8	—	—	—
	18	Manikpala	21,722	22,022	43,744	71	12	5	—	—	—	22	7	—	—
	19	South Suburban	17,222	12,222	29,444	40	4	5	—	—	—	22	—	—	—
	20	Tollyganj	11,122	7,222	18,344	10	—	—	—	—	—	4	2	—	—
	21	Cardo-Road	27,222	17,222	44,444	44	—	3	—	—	—	12	3	—	—
	22	Budge-Budge	11,222	6,222	17,444	16	—	2	—	—	—	5	—	—	—
	23	Barrackpur	14,222	10,222	24,444	62	7	3	1	—	—	7	—	—	—
24-Parganas	24	Kamarkhata	11,222	6,222	17,444	16	—	—	—	—	—	12	—	—	—
	25	Rajpur	6,222	6,222	12,444	17	—	—	—	—	—	12	—	—	—
	26	South Dum-Dum	7,222	2,122	9,344	15	—	—	—	—	—	9	—	—	—
	27	Barrackpur	11,222	6,222	17,444	18	—	—	—	—	—	9	—	—	—
	28	Parbat	6,222	4,722	10,944	12	—	1	—	—	—	2	—	—	—
	29	North Barrackpur	9,722	6,222	15,944	12	—	—	—	—	—	10	—	—	—
	30	Tilagarh	21,222	12,222	33,444	57	1	—	—	—	—	22	—	—	—
	31	Garia	7,222	3,722	10,944	2	—	1	—	—	—	2	—	—	—
	32	Nalhati	11,222	6,222	17,444	27	—	—	—	—	—	—	—	—	—
	33	Shantipur	24,222	12,222	36,444	22	—	—	—	—	—	6	1	—	—
Calcutta	34	Calcutta	227,222	222,222	449,444	1,211	120	24	2	—	—	22	22	2	22
	35	Krishnapur	11,222	11,722	22,944	22	—	—	—	—	—	12	—	—	—
	36	Nadia or Fabadrip	6,222	6,222	12,444	20	—	—	—	—	—	12	—	—	—
Nadia	37	Shantipur	12,122	12,222	24,344	22	—	—	—	—	—	12	—	—	—



Towns with a population of 10,000 and over in Bengal.

DEATHS REGISTERED.

Other towns.	Dysentery.	Diarrhoea.	Infantile.	Pneumonia.	Phthisis.	Other respiratory diseases.	Injuries including suicides.	Deaths from childbirth.	Other causes.	Total of all causes.			Total of corresponding month of previous year.			No.	Town.
										Male.	Female.	Total.	Male.	Female.	Total.		
	11	12		5		4	1		10	49	35	85	60	32	92	1	Burdwan.
9									3	6	7	13	16	14	30	2	Rangpur.
12	6	8				9	3		19	34	18	52	19	17	36	3	Azamgarh.
31	8	4							14	19	24	43	21	27	48	4	Dankura.
		7							6	18	21	39	26	27	53	5	Vishnupur.
	9	3			1		2		6	16	17	33	4	19	23	6	Sonepur.
16	7	7		2	1	5	2		6	29	27	56	21	31	52	7	Midnapur.
	1	4				1	1		1	7	3	10	13	23	36	8	Ghatal.
	16			15			5		17	36	29	65	27	28	55	9	Hoochly-Chinsura.
16	14					6	1		13	34	26	60	31	40	71	10	Selampur.
13	4					2			10	19	14	33	19	20	39	11	Bahra-Konagor.
		7				8			6	17	13	30	16	24	40	12	Baldysbati.
1	6			1		8			2	13	11	24	11	11	22	13	Bhadrapur.
2	3					1			2	8	3	11	21	13	34	14	Champani.
25	22	43		46	2	65	7		119	242	205	447	213	267	480	16	Howrah.
	1		1	1	1	2			2	10	6	16	29	20	49	17	Bally.
31	6	7	1	4	3	8		1	29	47	23	70	32	36	68	17	Champur-Chitpur.
3	10	5	4	10	9	17	1		60	78	64	142	104	68	169	18	Mankata.
	4	5		5			2		6	26	20	46	41	27	68	19	South Barabati.
4	1	1		4		1			2	11	8	19	10	11	21	20	Talipara.
24	7	8	2	6		6			26	29	23	52	34	23	57	21	Garden-Ranch.
17	6			2			1		1	21	14	35	24	12	36	22	Budge-Budge.
10	18			3	5	3	1		13	23	23	46	44	21	65	23	Birgaon.
	6								2	12	9	21	29	20	49	24	Kamarbach.
				3					2	6	17	23	21	16	37	25	Bajpur.
1	3		1	2		2	1	2	6	13	14	27	17	7	24	26	South Dum-Dum.
	5					1				6	6	12	13	10	23	27	Barrakpur.
2	2	9		1		2			2	7	9	16	8	19	27	28	Pasbati.
	8					4			6	12	11	23	7	11	18	29	North Barrakpur.
	1								4	47	22	69	20	46	66	30	Tingra.
						1			1	1	5	6	3	4	7	31	Garia.
17	1	2		2	1	1	1		7	11	7	18	9	10	19	32	Kalibati.
	3	4	1		2	1	1		9	22	17	39	21	21	42	33	Bhatpara.
7						1			14	19	13	32	29	18	47	34	Banthal.
	1			2		1				7	6	13	10	8	18	35	Boduria.
171	154	70	28	145	265	279	39	10	643	1,133	997	2,130	1,403	1,019	3,151	36	Calcutta.
	1			7			1		9	18	10	28	11	13	24	37	Krishnapur.
									8	7	14	21	14	25	39	38	Nadia or Mahadip.
	3			3			1		7	17	14	31	29	27	56	39	Sandipur.

## Vital Statistics for the month of September 1921 of the

District.	No.	Town.	POPULATION UNDER REGISTRATION ACCORDING TO CENSUS OF 1911.			BIRTHS REGISTERED.									
			Male.	Female.	Total.	Number registered (excluding still-births).	Still-born number registered.	Coolies.	Small-pox.	Typhoid.	Malaria.	Bacterial fever.	Measles.	Relapsing fever.	Kala-azar.
Murshidabad.	40	Berhampur	14,802	11,841	26,643	34	2	18			2	4		2	1
	41	Murshidabad	4,250	4,119	18,400	35	1	5							
	42	Asimganj	6,735	5,009	15,337	18	1	1			10				
	43	Kandi	6,112	5,434	15,900	19					11				
	44	Jangipur	4,432	5,315	11,408	26		1			11				
Khulna	45	Khulna	7,903	5,013	17,000	16					17				
	46	Guthika	5,507	5,100	10,003	7					8				
Hajrabadi	47	Rampur-Bhatia	12,067	10,849	22,400	34	2	1			25				
Dinajpur	48	Dinajpur	9,425	6,937	15,046	5		1			1				2
Jalpaiguri	49	Jalpaiguri	7,547	4,315	11,765	12					10				
Darjeeling	50	Darjeeling	11,621	7,974	19,000	20	3				1			6	
Rangpur	51	Rangpur	10,449	5,980	18,439	19					11				
Fakura	52	Fakura	10,000	5,216	19,274	10		1			13				
	53	Hirajganj	15,334	11,541	24,777	40		5			42				
Malda	54	English Bazar	7,297	6,035	14,332	25	1				22				
	55	Kawabganj	11,123	10,300	21,323	20					21				
Dacca	56	Dacca	93,091	44,450	108,341	207	14				16				28
	57	Narayanganj	16,735	9,125	27,871	15	3	1							
	58	Mymensingh	12,653	6,991	19,643	62	2	3							
	59	Netrokona	5,076	6,799	11,740	24									
Mymensingh	60	Jamailpur	11,725	8,391	21,109	45	5	20	1		21			1	
	61	Sherpur	8,510	7,875	15,591	43									
	62	Kishanganj	9,506	5,375	18,094	29	4							1	
	63	Bajitpur	5,447	5,295	10,324	18									
Faridpur	64	Tangail	6,102	7,669	13,369	24	1	1			9				
	65	Faridpur	5,617	6,114	12,131	8		9			10				
	66	Madaripur	10,442	5,924	18,073	37	4				17				
Bakarganj	67	Bakarganj	16,490	8,984	22,472	12		1							
	68	Pirojpur	5,123	5,472	11,304	19									
Chittagong	69	Chittagong	19,179	8,067	29,704	59	4	1							
Tippera	70	Coxilla	12,105	5,364	22,092	15	1	2							
	71	Brahmanbaria	11,671	10,624	22,295	49									
	72	Chandpur	5,052	5,045	12,717	9									
Total of month					2,615,169	4,907	241	173	9		224	15	1	17	63
Total of corresponding month of previous year.						4,199	275								
Increase + or decrease—						-102	+15								

REMARKS—1. The above table is compiled from returns collected by the municipalities and submitted to the Director of Public Health by the Civil Surgeons, and in a few instances are obviously incomplete.  
 2. The vital statistics of municipalities with a population of less than 10,000 have been excluded from this statement and incorporated.  
 3. The birth and death rates per 1,000 per annum have been omitted from this statement according to the Government of India.  
 4. Figures for the different diseases are not available for the corresponding month of the previous year.

CALCUTTA:  
 The 9th March 1922.

## Towns with a population of 10,000 and over in Bengal.

DEATHS REGISTERED.											Total of all causes.			Total of corresponding month of previous year.			No.	Town.
Other fevers.	Dysentery.	Diarrhoea.	Influenza.	Fæscæmia.	Phthisis.	Other respiratory diseases.	Injuries including scalds.	Deaths from childbirth.	Other causes.		Male.	Female.	Total.	Male.	Female.	Total.		
7	2		3	7	2	8			10	54	33	87	30	14	44	40	40	Barhampur.
										28	16	44	14	11	25	41	41	Murshidabad.
40	1								3	9	13	20	11	6	17	42	42	Asansol.
										8	5	13	9	5	14	43	43	Kandi.
										7	9	16	8	6	14	44	44	Jadipur.
										31	13	44	11	10	21	45	45	Khulna.
										4	2	6	7	0	7	46	46	Saikhira.
										30	15	45	13	14	27	47	47	Rampur-Badli.
										11	4	15	15	7	22	48	48	Dinajpur.
1										3	13	16	23	13	36	49	49	Jalpaiguri.
										40	23	63	2	2	4	50	50	Darjeeling.
										9	13	22	23	6	29	51	51	Mauguri.
										14	10	24	18	5	23	52	52	Pabna.
										39	14	53	32	21	53	53	53	Shraiganj.
										24	9	33	30	2	32	54	54	English Bazar.
										19	8	27	31	10	41	55	55	Nawabganj.
										104	167	271	145	131	276	56	56	Dacca.
20	31	6	1	10	3	5			1	37	30	67	50	20	70	57	57	Karunaganj.
16	7	1		1						11	24	35	35	5	40	58	58	Mymensingh.
17	2	2								2	7	9	15	10	25	59	59	Netrakona.
10		1								13	34	47	30	14	44	60	60	Jalgaon.
1	5	1								8	9	17	19	5	24	61	61	Shariatpur.
7	1									3	7	10	15	10	25	62	62	Kishoreganj.
6		2								6	2	8	6	1	7	63	63	Baizpur.
2										7	11	18	23	6	29	64	64	Tangail.
2	1	1								10	19	29	34	9	43	65	65	Faridpur.
	3									7	21	28	32	19	51	66	66	Madaripur.
	5									1	5	6	10	20	30	67	67	Barisal.
4										2	3	5	5	2	7	68	68	Pirojpur.
32										21	22	43	27	21	48	69	69	Chittagong.
4										3	7	10	9	1	10	70	70	Coxila.
17	3									12	13	25	23	17	40	71	71	Rashtanbaria.
2										1	3	4	6	3	9	72	72	Chandpur.
790	424	218	124	330	206	449	112	19	1,424	2,966	2,442	5,408	2,831	2,577	5,408			
										—436	—120	—556	—	—	—	—		

Taken as a whole, the statement presents a relative value, although the figures for individual towns probably only approximate to the actual in a proportion of cases in the returns for districts as ordered in Bengal Government, Municipal Department, letter No. 1185m., dated the 31st February 1914. Education Department, letter No. 22, dated the 24th March 1916.

CHAS. A. BENTLEY,  
Director of Public Health, Bengal.

**Statement showing the quantity of Salt in Bonded Warehouses and afloat on the river Hooghly on the 28th day of February 1922 and transactions during the half-month from the 18th to the 28th February 1922.**

Description of salt.	In Bulkea Government golas.	Quantity afloat.	Total.	TRANSACTIONS DURING HALF-MONTH FROM THE 18TH TO THE 28TH FEBRUARY 1922, INCLUSIVE.			
				Quantity on which duty has been paid.	Manifested quantity arrived in the port of Calcutta.	Deliveries from ship-board for consumption and for inland bonded warehouses.	Deliveries from bonded warehouses for consumption and for inland bonded warehouses.
United Kingdom—	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Liverpool and other Panga salt	808,080	68,322	876,402	161,108	58,699	21,100	35,416
Other European countries—							
Spanish salt	886,996	...	886,996	89,760	9,431	48,040	50,160
Hamburg and Bremen salt.	180,822	11,975	192,808	84,209	23,076	17,100	10,218
Hamburg and Bremen rock salt.	...	...	...	...	...	...	...
Port Said salt	819,091	...	819,091	15,600	4,168	22,810	42,370
Aden and Med Sea—							
Aden salt	1,061,411	58,166	1,119,577	376,450	371,659	301,660	129,433
Balti salt	...	...	...	...	...	...	...
Balti rock salt	...	...	...	...	...	...	...
Bawayah salt	...	...	...	...	...	...	...
Matawiah salt	610,956	...	610,956	14,900	...	...	11,900
Muscat and Persian Gulf—							
Muscat, Lingab and Hanjam salt.	...	...	...	...	...	...	...
Ditto ditto rock salt.	...	...	...	...	...	...	...
British India—							
Bombay salt	...	...	...	...	...	...	...
Madras salt	...	...	...	...	...	...	...
Cooonada salt	...	2,076	2,076	6,000*	6,000	8,924	...
Visagapatam salt	...	...	...	...	...	...	...
Tuticorin salt	...	92,290	92,290	141,000	141,000	75,408	...
Total	8,325,267	280,830	8,606,097	687,808	614,882	485,442	256,796

\* Duty on this quantity was paid at Cooonada.

Written off during the half-month—	Mds.
Wastage in Bulkea golas	3,477
Abandoned and destroyed	196
In transit—	
Aden salt	6,816

F. J. KARAKA,  
Assistant Collector of Customs for Imports.

CALCUTTA CUSTOM HOUSE, the 7th March 1922.

# IRRIGATION DEPARTMENT, BENGAL

Abstract Statement showing the approximate volume of Traffic and the Tollage on Canals in Bengal classed as Major Works and Minor Works and Navigation for the month of November 1921, as compared with the corresponding month of the previous year.

Canals.	1921-22.					
	WEIGHT OF CARGO.		RAFTS.		TOLLAGE.	
	During the month.	To end of the month.	During the month.	To end of the month.	During the month.	To end of the month.
<b>I.—Major Works.</b>	Tons.	Tons.	No.	No.	Rs.	Rs.
Midnapore Canal ...	2,875	32,721	4,212	14,717	2,328	24,482
Hijili Tidal ...	2,517	51,899	1,450	2,828	2,325	46,226
<b>Total</b> ...	<b>5,392</b>	<b>84,620</b>	<b>5,662</b>	<b>17,545</b>	<b>5,251</b>	<b>70,708</b>
<b>II.—Minor Works and Navigation.</b>						
Calcutta and Eastern Canals ...	42,995	275,742	51	1,018	28,992	181,222
Tolly's Nala ...	15,243	132,568	12	155,799	5,167	40,454
Madaripur Bheel ...	125,974	868,379	3,993	11,744	38,645	2,08,021
<b>Total</b> ...	<b>184,212</b>	<b>1,271,689</b>	<b>4,056</b>	<b>168,561</b>	<b>67,804</b>	<b>4,24,697</b>
Magrahat Channels ...	6,530	38,985	1,000	3,249	2,607	12,202
Orissa Coast Canal ...	2,252	21,797	1,269	30,817	948	7,704
Nadia Rivers ...	3,487	32,380	29,100	479,731	1,359	8,535
<b>GRAND TOTAL</b> ...	<b>196,481</b>	<b>1,364,781</b>	<b>36,425</b>	<b>682,358</b>	<b>72,719</b>	<b>4,52,938</b>

Canals.	1920-21.					
	WEIGHT OF CARGO.		RAFTS.		TOLLAGE.	
	During the month.	To end of the month.	During the month.	To end of the month.	During the month.	To end of the month.
<b>I.—Major Works.</b>	Tons.	Tons.	No.	No.	Rs.	Rs.
Midnapore Canal ...	3,108	36,837	7,525	19,650	2,348	25,480
Hijili Tidal ...	4,046	49,182	520	1,678	3,882	47,276
<b>Total</b> ...	<b>7,154</b>	<b>86,019</b>	<b>8,045</b>	<b>21,328</b>	<b>6,210</b>	<b>72,756</b>
<b>II.—Minor Works and Navigation.</b>						
Calcutta and Eastern Canals ...	40,745	272,989	92	5,920	26,684	1,76,837
Tolly's Nala ...	14,780	135,706	16,380	118,037	4,582	41,719
Madaripur Bheel ...	139,805	1,047,888	5,068	10,060	34,773	2,41,139
<b>Total</b> ...	<b>195,310</b>	<b>1,456,583</b>	<b>21,530</b>	<b>134,087</b>	<b>66,039</b>	<b>4,59,685</b>
Magrahat Channels ...	6,795	31,535	1,400	3,645	2,980	11,698
Orissa Coast Canal ...	2,377	21,240	523	10,508	911	8,104
Nadia Rivers ...	5,110	34,162	127,410	666,052	1,670	8,009
<b>GRAND TOTAL</b> ...	<b>209,592</b>	<b>1,543,520</b>	<b>150,863</b>	<b>714,242</b>	<b>70,850</b>	<b>4,87,506</b>

T. C. BHATTACHARYA,  
Asst. Secretary to the Government of Bengal.

CALCUTTA,  
The 9th March 1922.

## GOVERNMENT OF BENGAL, IRRIGATION DEPARTMENT.

*Approximate return of traffic on the Circular and Eastern Canals for the week ending Saturday, the 4th March 1922, as compared with the corresponding week of the previous year.*

Name of cargo.	WEEK ENDING SATURDAY, THE 4TH MARCH 1921.			WEEK ENDING SATURDAY, THE 5TH MARCH 1922.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
		Mds.	Rs.		Mds.	Rs.
Rice and paddy ...	776	243,720	4,087	559	172,552	2,865
Jute ...	52	18,760*	283	96	59,025†	569
Firewood ...	—	58,450	971	48	22,375	332
Other articles ...	1,023	314,940	3,572	720	164,400	2,132
Total ...	1,955	636,860	8,913	1,418	418,352	5,897
Empty boats and rafts ...	605	...	2,356	612	...	1,662
GRAND TOTAL ...	2,540	636,860	11,269	2,030	418,352	7,559

\* Weight by canal measurement — — — 19,440  
 † Ditto ditto — — — 51,443½

T. C. BHATTACHARJI,

Assistant Secretary to the Government of Bengal.

CALCUTTA,

The 10th March 1922.

## CORPORATION OF CALCUTTA.

## NOTICE.

IN compliance with the provisions of section 570 of the Calcutta Municipal Act, 1899, it is hereby notified for general information that the following rule framed by the Corporation of Calcutta, under section 73 (b) of the Calcutta Municipal Act, has been sanctioned by the Government of Bengal in their letter No. 1166L.S.-G., dated the 1st March 1922.

J. N. GUPTA, Chairman of the Corporation.

CENTRAL MUNICIPAL OFFICE, the 9th March 1922.

Rule framed by the Corporation of Calcutta:—

(1) Any Municipal Officer or servant, who has contributed compulsory subscriptions to the Provident Fund and has rendered continuous good service for not less than fifteen years, shall, on retirement, receive in addition to the sum payable out of the Provident Fund, a gratuity at the rate of half a month's pay for each completed year of service rendered by such officer or servant, subject to a maximum of fifteen months' pay. The amount of the gratuity shall be calculated on the pay drawn by him at the time of retirement.

(2) For the purpose of this rule—

(a) "retirement" means retirement under the age limit, subject to any duly sanctioned extension of service, or on account of physical unfitness, illness or the abolition of an appointment or on completion of the terms of an appointment, or for any other reason considered adequate by the General Committee. It also means voluntary retirement or resignation of the service with the consent and approval of the authority empowered to appoint the officer or servant;

(b) any authorised leave of absence, whether with or without allowances, or an overstayal for sufficient reasons of any leave, does not constitute an interruption of continuous service;

(c) "pay" includes a personal allowance or such other allowances as are an integral portion of substantive pay, as distinguished from an acting allowance or an allowance for a specific purpose, e.g., conveyance allowance.

# **CALCUTTA IMPROVEMENT TRUST.**

**Notice under section 43 of Bengal Act V of 1911.**

**Scheme No. XXII - Nebutola Lane Widening.**

*(St. James Square to Bowbazar Street).*

The Board of Trustees for the Improvement of Calcutta hereby give notice that a Street Scheme, viz., Scheme No. XXII (Nebutola Lane Widening; St. James Square to Bowbazar Street) has been framed for the area bounded as follows:—

*On the North*—From a point on Bowbazar Street at the north-western corner of premises No. 119, Bowbazar Street running eastwards along the southern edge of Bowbazar Street to a point on the southern edge of Bowbazar Street about 50 feet from the north-eastern corner of premises Nos. 124 and 124-1, Bowbazar Street.

*On the East*—From this point southwards in a line with the eastern edge of St. James Square to the south-western corner of 8, St. James Square.

*On the South*—From this point westwards along the northern edge of St. James Square South and then across Nebutola Lane along the northern edge of Hidaram Banerjee Lane to the south-western corner of premises No. 41-1, Hidaram Banerjee Lane.

*On the West*—From this point northwards in a straight line to a point on the north-western corner of premises No. 119, Bowbazar Street whence at first started.

Particulars of the scheme, a map of the area comprised in the scheme and a statement of the land which it is proposed to acquire may be inspected at the office of the Trust 5, Clive Street, on week days between the hours of 11 A.M. and 4 P.M. and on Saturdays between 11 A.M. and 2 P.M.

Copies of the above documents will be delivered to the applicants on payment of the following fees:—

	Rs.	A.	P.
Particulars of the Scheme ... ..	0	4	0
Map of the area ... ..	1	0	0
Statement of land which it is proposed to acquire ... ..	0	4	0

Objections to the Scheme will be received upto May 15th 1922.

C. H. BOMPAS *Chairman.*

CALCUTTA,

*The 3rd February 1922.*

# **CALCUTTA IMPROVEMENT TRUST.**

Notice under section 63 (5) of Bengal Act V of 1911 as amended by Bengal Act III of 1915.

NOTICE is hereby given that the Board of Trustees for the Improvement of Calcutta has applied to the Local Government for sanction to the plan of the proposed Public Street No. XLII (Chandney Chowk Street widening), which was originally published in the issue of the *Calcutta Gazette* of 20th July 1921.

C. H. BOMPAS, *Chairman.*

5, CLIVE STREET, CALCUTTA, *the 10th March 1922.*





# The Calcutta Gazette

WEDNESDAY, MARCH 22, 1922.

## SUPPLEMENT.

### OFFICIAL PAPERS.

[Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of five rupees per annum if delivered in Calcutta, or seven rupees and eight annas if sent by post.]

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## APPOINTMENT OF A LABOUR INTELLIGENCE OFFICER FOR BENGAL.

### GOVERNMENT OF BENGAL.

#### COMMERCE DEPARTMENT.

##### Commerce.

CALCUTTA, THE 15TH MARCH 1922.

#### RESOLUTION—No. 1163 Com.

As a result of the recommendations of the Indian Industrial Commission and in view of the complex labour situation which arose after the war,

the Government of Bengal, after consultation with the Government of India, created, with effect from the 1st July 1920, a temporary post of Industrial Intelligence Officer. This officer's duty was in general to collect and make available for the public detailed information on matters connected with the development of industry, and in particular to investigate and report on labour conditions and the facts and causes of labour disturbances. The term for which this post was created expired on the 28th February 1922. The attention of the Industrial Intelligence Officer during the last 18 months has been occupied almost entirely with the wide-spread unrest in the labour world. India's international obligations as a member of the League of Nations, and in particular her active participation in the International Labour Conferences involve the systematic collection of information regarding her labour problems for supply, both to the International Labour Office itself and to the delegates of India to the Conferences. Moreover, it is the request of the Secretary of State that labour disturbances in India should be accurately and promptly reported to him for the information of Parliament. Further in paragraph 19 of their report, the Committee on Industrial Unrest appointed by this Government in 1921, laid great stress on the importance, if Government was to maintain a proper watch over the industrial situation, of its having full and early information about all forms of labour troubles. In view of these considerations which indicate the necessity for a separate organisation in Bengal to deal properly with labour matters and to keep Government informed regarding them, the Governor in Council has decided to create directly under this Government a post of Labour Intelligence Officer temporarily for two years in the first instance. Mr. R. N. Gilchrist of the Indian Educational Service has been appointed to this post with effect from the 6th March 1922.

2. The collection of industrial intelligence including information connected with the development of industries will, for the present, be undertaken by the Director of Industries, to whom all references connected with this subject should be addressed.

ORDER.—Ordered that this resolution be published in the *Calcutta Gazette* for general information and copies forwarded to the officers concerned.

By order of the Governor in Council,

H. E. SPRY,

*Secretary to the Government of Bengal (offg.).*

**RESOLUTION ON THE REPORT OF THE MAGISTERIAL  
ENQUIRY INTO THE SALANGA HÂT SHOOTING INCIDENT,  
PABNA, ON THE 27TH JANUARY 1922.**

**GOVERNMENT OF BENGAL**

**POLITICAL DEPARTMENT.**

*Political.*

**CALCUTTA, THE 14TH MARCH 1922.**

**RESOLUTION—No. 4599P.**

**Read—**

The Report of the Magisterial enquiry into the Salanga Hât shooting incident Pabna, on the 27th January 1922.

On the 27th January 1922 an attack was made on a force of armed police at Salanga Hât in the district of Pabna, and the police opened fire with the result that six persons were killed and 31 wounded. A magisterial enquiry was started at once, and a report was received by Government on the 18th February. As the police investigation into the riot case has now been closed, and no proceedings are pending against any individual, the Magistrate's report is published for general information.

The reason for the outbreak is clearly shown to be the turbulent spirit aroused in the neighbourhood by the propaganda carried on under the guise of the non-co-operation movement by irresponsible bands of volunteers, encouraged by previous successful attempts to resist the forces of law and order. The immediate cause of the attack on the police force was the arrest of certain volunteers who were intimidating the shopkeepers and preventing the public generally from having access to the shops. His Excellency in Council is of opinion that the evidence shows that the crowd was in a dangerous mood and determined to rescue the prisoners. The District Magistrate and the Superintendent of Police who were present in person showed commendable patience in dealing with the mob, and the orders to fire were only given when the police force was clearly in danger. His Excellency in Council agrees with the Commissioner that the orders to fire were justified and inevitable in the very difficult circumstances in which the district officials were placed. The number of shots fired was large, but the attack on the police was of a persistent and determined character. However had the firing been more properly regulated from the outset it is possible that the dispersal of the mob could have been effected earlier and at less expenditure of ammunition. The orders of Government prohibit the firing of blank ammunition in dealing with riots; though the desire of the officers to avoid bloodshed was natural, this direction is based on long experience, and in the present case there is evidence that the risk which is always to be apprehended was actually incurred, namely, that the mob became the more defiant and reckless by seeing that the earlier shots were ineffective.

The order to cease fire was given as soon as the mob showed signs of dispersing, and every effort was made to attend to the wounded. His Excellency in Council regrets exceedingly that this loss of life ensued, but he considers that the District Magistrate took the only action possible, and the responsibility for the deaths of these six men rests with those who by their propaganda inflamed the violence of the crowd.

ORDERED that this resolution together with the magisterial report be published for general information.

By order of the Governor in Council,

H. L. STEPHENSON,

*Chief Secretary*

*to the Government of Bengal.*

**Report of the Magisterial enquiry into the occurrence at  
Salanga Hat, police station Raiganj, subdivision Sirajganj,  
district Pabna, on the 27th January 1922.**

I OPENED the enquiry at Salanga Hat on the 28th January, and closed it at Pabna on the 12th February. The opening of the enquiry was proclaimed by beat of drum at Salanga and neighbouring villages, inviting all who had any knowledge of the occurrence to appear and give evidence. Thirty-six witnesses appeared before me and were examined by me at Salanga, 10 at Sirajganj including the Deputy Superintendent of Police and Assistant Surgeon and the rest at Pabna and Ullapara. Altogether 78 witnesses have been examined. On the day the enquiry was instituted, Babu Annada Prasad Thakur, a prominent mukhtear of Sirajganj appeared before me at Salanga and said he was watching my enquiry on behalf of the public and took full notes of the depositions. He was also present at Sirajganj and Ullapara, but was not present at Pabna. Of the 78 witnesses examined, 39 are public servants, and of the witnesses who were not in Government employ, only seven witnesses gave evidence on material points. This is due to two reasons. First, that the men who knew most about the occurrence were actually concerned in the occurrence, and could not give evidence without incriminating themselves. Second, that some of the men who might have given evidence were prevented by the non-co-operators from appearing before me.

2. Before giving an account of the present occurrence, I think I should briefly refer to the recent growth of a dangerous spirit of lawlessness and a systematic campaign of violence, intimidation and destruction prevailing in the Sirajganj subdivision, as illustrated by the following incidents:—

(1) The first incident occurred at Kalibari, police-station Belkuchi, on the 5th January 1922, when the Sub-Inspector of Belkuchi attended a non-co-operation meeting with one constable. After some speeches were made, the enrolment of volunteers commenced. The Sub-Inspector noted the names of the local volunteers. There was a volunteer from Rangpur who refused to give his name and tauntingly said his name was volunteer and his home was jailkhana. All the volunteers shouted "Bande Mataram" and some of the people present shouted "beat sala police, mar sala police." Fearing an assault, the Sub-Inspector and his constable ran off. They were chased. The constable was overtaken and his *pugree* torn off. The Sub-Inspector took shelter in the compound of a public woman. The mob chased him and surrounded the neighbouring house imagining that he had concealed himself in it and began to force open the door. In the interval the Sub-Inspector escaped to a cane bush and concealed himself till night-fall. He came out of his concealment at night and returned safely to the police-station escorted by some policemen who had come to rescue him. A case under sections 147 and 353, I.P.C., has been instituted. (Exhibit 8.)

(2) The second occurrence took place at Chandaikona in police-station Raiganj which is about 13 miles from Salanga. At 4 P.M. on the 21st January the Sub-Inspector of Raiganj found three volunteers picketing the excise shops there. He had orders from the Subdivisional Officer, Sirajganj, to arrest volunteers picketing excise shops. He arrested the three volunteers on their refusing to give their names and addresses. Thereupon the attitude of the *hat* people became threatening and the Sub-Inspector manacled the three prisoners and began to remove them. The bazar people then began to shout and formed up behind the officer in charge and his men. As the crowd started to push right on to them, the Sub-Inspector ordered his three constables to fall back and check the advancing crowd. As soon as they did so, the crowd managed to separate the constables and began to beat them and pelt them with clods of earth. The Sub-Inspector thereupon ordered them to load their rifles. He himself had one and loaded it. On hearing the order to load the crowd immediately jumped on the constables, threw them down and belaboured them. One of their rifles was snatched away. The Sub-Inspector started to retire towards the Chandaikona High school pointing his rifle at the crowd and threatening to fire if they come nearer him. At this point the Head Master of the school appeared and succeeded in getting the Sub-Inspector and the three prisoners into the school. The crowd numbering about 2,000 surrounded the school and pelted the Sub-Inspector with clods, one of which lamed him. They demanded the release of the prisoners. One of the constables had the key of the handcuffs. The key was brought and

the prisoner released. The Sub-Inspector was helpless. The mob insisted on the Sub-Inspector taking off his uniform and promising to resign. In fear of his life he was compelled to do so. At this stage the news went round that the Excise Sub-Inspector had arrived. The mob decided to have his blood. Part of the mob went off; failing to find the Excise Sub-Inspector, they wrecked the liquor shop and looted the ganja and opium shops of about Rs. 200 worth of stuff and broke up the shops. Three cases under sections 147, 353, 389 and 221, I. P. C., have been instituted. (Exhibits 5, 6 and 7).

(3) At 12 noon on the 28th January 1922, the Sub-Inspector of Kazipur with some constables, daffadars and chaukidars had gone to the village of Fuljore to investigate a fish-looting case and to arrest the offenders. There they came to know that the accused at the instigation of the non-co-operators had decided that they would neither obey the police and the Magistrate nor the orders of the present Government and that if the police came to arrest them they would be taught a lesson. Notwithstanding this threat, the Sub-Inspector proceeded to arrest the accused. Seeing one of the accused Amanat Sarkar running off they chased him to the house of one Nazar Ali Kabiraj. Many people assembled at this house. The Sub-Inspector ordered his men to surround the house. Thereupon Nazar Ali began to abuse the Sub-Inspector and shouted "beat the *salas*." A *dao* was hurled at the Sub-Inspector aiming at his head. The Sub-Inspector was on horse-back. The *dao* passed by his head and dropped behind him. A daffadar seized it but was severely maimed and the *dao* was snatched away from him. The Sub-Inspector and his men were surrounded. The villagers who were armed with clubs threatened to kill them if they attempted to arrest the accused. They were stoned. They then cried for help. A village headman came and interfered and saved the life of the Sub-Inspector and his men. A case under sections 147, 342, 225 and 353, I. P. C., has been instituted. (Exhibit 10.)

(4) On the 26th January 1922, the flag of one Ram Karam Pandey, a surveyor of the Traverse Survey Party of Sirajganj, was forcibly taken away at Bilbagdom and when he remonstrated he was abused by the villagers and told to leave the place, otherwise he would be killed. He was reminded of what had happened to the Bogra Settlement Officer (Mr. D. MacPherson) and the Sub-Inspector of Raiganj at Chandaikona. The surveyor and his party had to leave the village ignominiously. A case under section 147, I. P. C., has been instituted. (Exhibit 11.)

(5) About the 4th January 1922, Rev. T. C. Kelly of the Australian Baptist Mission, Sirajganj, was opposed by an excited crowd at Belkuchi and forbidden to work in the *hât*. A volunteer snatched away a book (scripture) from a purchaser and tore it to pieces. When Mr. Kelly remonstrated he showed a defiant attitude. The volunteers followed him wherever he went and were bent on causing a disturbance. On being informed that a plot was being formed to do him serious bodily harm, he was forced to leave the place with his preachers.

Again on the 20th January 1922 Mr. Kelly visited the Salanga Hât with two Indian preachers as was his custom for many years. On his going through the cattle yard, a crowd surrounded him and demanded to know the reason for his presence at the *hât*. A man was excitedly asking him questions about his work in the *hât* and waived his fist in his face. He was forced to retire. On the following Monday, the 23rd January, when his two preachers went to the *hât*, they met with strong opposition from volunteers, who egged the crowd on to oppose their presence. They were threatened with bodily harm. So they retired quickly and quietly. This opposition and intimidation by the volunteers and the mob is attributed by Mr. Kelly to intense racial feeling.

(6) The evidence of excise vendors Gopal Chandra Bhattacharja and Bhawan Prasad Guin will show how the volunteers picketed excise shops, terrified the vendors and forcibly turned away the customers. As mentioned above, the excise shops at Chandaikona were wrecked and property valued at Rs. 200 looted a week before the present occurrence. The looting of the excise shop at Salanga was also in contemplation on the date of the occurrence.

3. Salanga Hât is in police-station Raiganj and 16 miles north-west of the town of Sirajganj. The people of the village and its neighbourhood are notorious for turbulence. During the agitation in connection with the Partition of Bengal and the outbreak of violence in certain parts of the province, the Salanga Hât was looted by the mob. The disturbance took

place on the 14th May 1907. Some hucksters' stalls and nine foreign cloth shops of Marwaris were looted. The articles plundered were foreign salt and cloth. The total value of the property lost was estimated at Rs. 7,500. Thirty-six persons were tried and 31 convicted under sections 147 and 379, I.P.O., and sentenced to various terms of imprisonment. Salanga and its neighbourhood being in a disturbed state an additional police force was quartered there for a period for one year (*vide* Government notification No. 4052J., dated the 19th September 1907, published in the Eastern Bengal and Assam Gazette of the 25th September 1907, at page 4025 of Part II). A detachment of Gurkhas was stationed there to maintain peace and order. The outbreak of disturbance was attributed to the preachings of some local Mahomedan leaders of Sirajganj. The present disorder is doubtless due to the propaganda of the uneducated and unscrupulous volunteers of the non-cooperation party amongst the ignorant and excitable masses.

4. On the 24th January 1922, Mr. O'Sullivan, Deputy Inspector-General of Police, Rajshahi Range, came to Pabna when the difficult situation at Sirajganj was discussed. It was decided to have a route march of a contingent of the armed force through the affected parts of the Sirajganj subdivision and to start it from Chandaikona Hât on the 27th January 1922 the date of the present occurrence.

5. From the evidence adduced before me and from what I saw with my own eyes, I believe what occurred was as follows.

6. On the 27th January 1922 at about 4 P.M., the District Magistrate and the Superintendent of Police arrived at the Salanga Inspection Bungalow. They met the Deputy Superintendent of Police of Sirajganj, the Sub-Inspector of Ullapara and a detachment of the District Special Armed Force consisting of three head-constables and 24 constables. From the inspection bungalow, the party proceeded to the Salanga Hât and when they came near the cloth shops, some volunteers were found picketing there. Here some hât people complained to the District Magistrate against the intimidation and interference with sale of foreign cloth by some volunteers headed by one Anath Ray of Salanga. Some volunteers were found there with badges and Gandhi caps on. The District Magistrate ordered their arrest. The Deputy Superintendent of Police arrested two of them and made them over to some constables near him. Here some people further informed the party that more vigorous picketing was going on near the excise shop, whereupon they proceeded towards it with the arrested volunteers. The party found a batch of volunteers picketing the shop. Three or four of them were also arrested. After their arrest, one of them shouted, "Allah Ho Akbar, Bande Mataram." Thereupon there was a howling and shouting of the whole assembly. About 2,000 people then rushed towards the party and surrounded them shouting, "we will not allow the volunteers to be taken away, catch them, beat them." Their attitude was threatening. The District Magistrate, Superintendent of Police and the Deputy Superintendent of Police endeavoured to reason with and quiet them but to no effect. The armed force also tried to disperse the crowd but were equally unsuccessful. Thereupon the Superintendent and the Deputy Superintendent of Police warned them that if they would not disperse they would be fired upon. At this time the fringe of the crowd surrounded the Deputy Superintendent of Police and he pushed them behind. Thereupon his hât was knocked off by one of the rioters and another man knocked him senseless by a lathi blow on his head. He began to bleed profusely. He was again hit on his left ring finger. The Superintendent of Police ran to his assistance followed by the Deputy Superintendent of Police's orderly Ramdhari Singh, Chattoo syce and constable Kishan Behari Tewari. The Superintendent of Police was given a lathi blow on the back. Ramdhari Singh was similarly assaulted. Chattoo syce was dealt a lathi blow on the head. Kishan Behari Singh was hit on his left palm by a pointed bamboo when he attempted to ward off a blow aimed at his head. The murderous character of the assault on the Deputy Superintendent of Police will be evident from the fact that four persons were assaulted and injured in attempting to rescue him. He was, however, rescued and removed to the excise shop in an unconscious condition. The crowd began to press upon the police and stone them from the north, east and west. They were ordered to retire towards the excise shop and form up. This afforded them some protection. The assembly having become hostile and riotous their object being to overpower the police and rescue the volunteers, it became the duty of the police under section 128 C. P. C., to arrest the rioters and to disperse the crowd by force. The dispersal was absolutely necessary for their personal safety. But as the former course was



impossible in view of the numerical strength of the rioters, they were commanded to disperse at once, otherwise they would be fired upon and dispersed. But the only response was a volley of clods, stones and pegs and pointed bamboos. The District Magistrate was twice hit on his hat with clods while ordering the mob to disperse. With a view to frighten away the crowd, the order to fire blank was given. The mob at first showed signs of retreat. But suddenly one of the volunteers shouted out "blank fire, this is nothing" and incited the mob to violence. Thereupon the rioters rushed forward and began to shout that it was nothing, and volleys of missiles continued to be poured upon the police force. Most of the armed force-men were hit with stones and some injured. The attitude of the mob became still more aggressive. Buckshot was fired. One of the wounded volunteers Mafizuddi Shekh of Rajshahi had managed to escape from the place of confinement as the constable told off to guard him had to fall in with the rest. This man joined the rioters and was hit on the leg by a buckshot. He dangled his leg in the air and excited the mob saying, "I have not been hurt, there is nothing in the shot, you go on beating the *salas*." "You brother, you see how I am hit and my blood dropping." Thereupon the mob grew more infuriated and attempted to rush and overwhelm the force. Thousands of stones, clods, pieces of bamboos were then showered upon them. As a last resort ball cartridges were ordered to be fired. When three or four persons were knocked down the crowd began to disperse and the order to "cease fire" was given. In all 93 rounds of blank, 49 rounds of buckshot and 35 rounds of ball were fired. From the above it would be quite clear that the police were forced to fire in self-defence. It would be observed that rule 180 (IX), Police Regulations, Bengal, Part III, which prohibits blank fire was violated. This was done only to avoid bloodshed.

7. A rough plan of the place of occurrence is annexed to this report. (Exhibit 2.) The place where the armed force were drawn up, the direction from which missiles were hurled at them, the direction in which they fired and the places where the dead and wounded were found have all been shown in it. It would appear that they fired in the direction from which the missiles were coming and there are no good grounds for supposing that the firing was indiscriminate. It should, however, be mentioned that a case under section 147, C. P. C. and 353, I. P. C., has been instituted against the rioters which is now under police investigation.

8. Four witnesses who were apparently hostile said that the armed constables had assaulted the crowd or slapped a volunteer. This is not supported by any of the more reliable witnesses. It is also improbable in itself as the constables were under the eye of their superior officers. It is not a fact as has been alleged in some quarters that some cattle were killed.

9. The number of casualties on the spot was four dead and six wounded. A careful search was made for wounded persons but none else was found. A local medical practitioner, Amulya Charan Ray, was called and he rendered first aid to the wounded. He was also requested by the District Magistrate to accompany the injured persons to Sirajganj on payment of proper fees, but he refused to go on the ground of his wife's illness. Considerable difficulty was experienced in securing carts for them. Eventually four carts were secured and the dead and wounded taken to the Sirajganj hospital. One of the wounded died on the way to the hospital. It should, however, be stated that two wounded men were carried in a cart along with a dead body, which was, however, separated from them by the carter who sat between them. The injured persons were facing towards the back of the cart while the corpse was placed between the carter and the bullock. This was unavoidable in a difficult situation. The wounded men were provided with as much straw as could be had on the spot. Every facility was given to the friends and relatives of the wounded to help them.

10. Next morning, the people were informed by beat of drum to produce any wounded or dead person either before the District Magistrate at Salanga camp or to take them to the Sirajganj hospital at the expense of the Government. A dead body was produced before the District Magistrate. As no conveyance could in spite of all efforts be got to take the body to Sirajganj, it was made over to the relatives. He had a gunshot wound in the lower part of the body. This injury was alleged to be a bayonet wound, but on turning the body over it was discovered that a ball was lodged on the other side of the body opposite the wound which clearly indicated that it was a gunshot wound. No injured person, however, appeared before the District Magistrate, although he halted at Salanga for three days after the



occurrence. It was said that they had kept away out of fear but they were assured that no harm would be done nor any charge laid against them. Still none appeared. For three days the volunteers moved from village to village and collected 18 wounded persons at the Salanga Congress office and placed them under the treatment of Dr. Annada Gobinda Chakrabarti, who was deputed there by the Sirajganj Congress Committee. Sub-Inspector Dinesh Chandra Ray of Raiganj was deputed to record their names and nature of injuries and also to send them to the Sirajganj hospital. They gave their names and showed their injuries to the Sub-Inspector, but all but one absolutely refused to go to Sirajganj. Subsequently the District Magistrate and the Superintendent of Police visited and requested them to go to the Sirajganj hospital where they would be properly housed, fed and treated. At first four or five of them had consented but eventually only two agreed and were taken to the hospital. The compounder of the Taras Charitable Dispensary was then brought to Salanga and he has been attending to those who had refused to go to Sirajganj. Their injuries were slight. In all nine injured persons came to the Sirajganj hospital for treatment. From the evidence of Dr. A. G. Chakrabarti it would appear that 22 persons were examined by him. Thus the total casualties are six dead and 31 wounded, of whom only four were seriously injured. Among the dead, one was a Hindu and the rest Mahomedans. All were adults.

11. Names and antecedents of the dead were ascertained on the spot immediately after the occurrence. Among them there were two registered criminals whose bodies were found in the front rank of the rioters which would show that the disorderly element of society had taken a prominent part in the riot.

12. The loss of human life is extremely regrettable but from the above account it would appear that volunteers were primarily responsible for it. The police were placed in such a critical and dangerous position that they had no other alternative but to fire upon the mob to extricate themselves from it. Had this course not been adopted they would have been overwhelmed and possibly wiped out. Judging from the past conduct of the people of Salanga and from what had happened at the neighbouring *hat* at Chandaikona a week before, it would also appear probable that the excise and foreign cloth shops would have been looted, as the volunteers were arrested for picketing them.

RAMANI MOHAN DAS,  
*District Magistrate.*

PABNA,

*The 14th February 1922*

# MONTHLY WEATHER AND CROP REPORT OF BENGAL FOR FEBRUARY 1922.

**i. Character of the Season.**—Excepting in the first week of the month when there were scattered showers in many parts of the province, the rest of the month was dry. The usual rainfall statement is appended.

**ii. Progress of Agricultural Operations.**—Harvesting of potatoes and oil seed crops continued. Rain was badly needed for the growth of standing crops and for the cultivation of land for jute and other autumn crops.

**iii. State of Standing Crops.**—The condition of standing crops was reported to be only fair.

**iv. Prospects and Probable Outturn.**—The outturn of winter rice was estimated to be normal. Owing to prolonged drought the prospects of standing crops are not satisfactory.

**v. Damage of Standing Crops.**—Standing crops have been suffering from continuous drought which is likely to cause some damage.

**vi. Condition of Agricultural Stock.**—The condition of live-stock was generally fair. Stray cases of cattle disease were reported from parts of Nadia, Darjeeling, Bankura, Rangpur and Cooch Behar.

**vii. Failure of Pasturage and Fodder.**—No scarcity of fodder was reported from any part of the province.

**viii. Prices of Food-grains.**—During the second fortnight of the month under review, the prices of common rice rose in three districts, fell in eight and remained stationary in the rest. The prices varied from 9½ seers per rupee in Cooch Behar to 5½ seers in Darjeeling.

**ix. Condition of Agricultural People.**—The condition of agricultural population throughout the whole province was generally fair.

G. EVANS,

Director of Agriculture, Bengal.

Dacca, the 18th March 1922.

## Statement showing the normal and actual rainfall in each district during February 1922.

Division.	District.	Normal district rainfall for the month of February 1922.	Actual district rainfall for the month of February 1922.	Variation from the normal.	Division.	District.	Normal district rainfall for the month of February 1922.	Actual district rainfall for the month of February 1922.	Variation from the normal.
		Inches.	Inches.	Inches.			Inches.	Inches.	Inches.
Presidency	24-Parganas	1.21	Nil	-1.21	Rajshahi— contd.	Rangpur	0.88	0.04	-0.84
	Calcutta	1.17	Nil	-1.17		Bogra	0.83	0.13	-0.70
	Nadia	1.02	0.40	-0.62		Pabna	0.84	0.10	-0.74
	Murshidabad	0.80	0.24	-0.56		Malda	0.68	0.22	-0.46
	Jessore	1.21	Nil	-1.21	Dacca	Dacca	1.03	0.05	-1.00
	Khulna	1.22	Nil	-1.22		Sylhet	0.82	0.03	-0.79
Burdwan	Burdwan	1.04	0.16	-0.88		Faridpur	1.10	0.04	-1.06
	Birbhum	0.70	0.12	-0.58		Bakerganj	1.15	Nil	-1.15
	Bankura	1.16	0.20	-0.96	Chittagong	Chittagong	0.80	Nil	-0.80
	Midnapore	1.26	0.00	-1.26		Tippah	1.00	0.00	-1.00
	Hoochly	1.22	0.04	-1.18		Hoakhal	1.00	Nil	-1.00
	Howrah	1.27	Nil	-1.27		Chittagong Tracts	0.80	Nil	-0.80
Rajshahi	Rajshahi	0.71	0.00	-0.71	Cooch Behar	Cooch Behar	0.71	0.00	-0.71
	Dinajpur	0.75	0.10	-0.65		Tripura State	0.60	0.20	-0.40
	Jalpaiguri	0.95	0.01	-0.94					
	Darjeeling	0.80	0.00	-0.80					

IRRIGATION DEPART

Statement showing heights over mean sea-level and low water in the January 1922, and the highest reading of each gauge over

DATE.	RIVER GAUGES.										
	Mirzapur. Zero of gauge 308.23 ft.		Benares. Zero of gauge 192.80 ft.		Buxar. Zero of gauge 187.44 ft.		Dinapore. Zero of gauge 124.13 ft.		Monghyr. Zero of gauge is at mean sea level.		
	Distance in miles.	From Allah- bad, '64	From Allah- bad, 124.	From Mirzapur, 48.	From Benares, 94.	From Benares, 94.	From Benares, 177.	From Buxar, 87.	From Benares, 287.	From Dinapore, 110.	
	Highest gauge reading.	3rd September 1916. 206.87.	3rd September 1916. 344.30.	3rd and 4th Septem- ber 1916. 340.80.	3rd and 4th Septem- ber 1916. 300.80.	3rd and 4th Septem- ber 1916. 300.80.	8th September 1901. 168.78.	8th September 1901. 168.78.	8th September 1901. 124.19.	8th September 1901. 124.19.	
	Lowest gauge reading.	28th June 1897. 167.20.	1st May 1877. 187.80.	1st May 1877. 187.80.	10th to 14th May 1916. 159.20.	10th to 14th May 1916. 159.20.	30th April 1919. 126.18.	30th April 1919. 126.18.	30th April to 8th May 1914. 94.59.	30th April to 8th May 1914. 94.59.	
		Height over zero of gauge.	Height over mean sea-level.	Height below zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.
1	2	3	4	5	6	7	8	9	10	11	12
1st	...	12.71	218.93	1.42	195.38	4.08	171.63	7.60	141.53	101.60	101.60
2nd	...	12.67	218.89	1.50	195.30	4.00	171.55	7.50	141.73	101.60	101.60
3rd	...	12.62	218.84	1.55	195.22	3.92	171.47	7.30	141.53	101.50	101.50
4th	...	12.58	218.80	1.58	195.22	3.92	171.47	7.30	141.53	101.40	101.40
5th	...	12.54	218.76	1.67	195.13	3.83	171.38	7.30	141.53	101.30	101.30
6th	...	12.46	218.68	1.67	195.13	3.83	171.38	7.60	141.43	101.30	101.30
7th	...	12.42	218.64	1.75	195.05	3.75	171.30	7.70	141.93	101.20	101.20
8th	...	12.42	218.64	1.83	194.97	3.75	171.30	7.60	141.83	101.20	101.20
9th	...	12.37	218.59	1.83	194.97	3.67	171.22	7.20	141.43	101.10	101.10
10th	...	12.37	218.59	1.83	194.97	3.68	171.13	7.20	141.43	101.10	101.10
11th	...	12.37	218.59	1.92	194.88	3.58	171.13	7.00	141.23	101.00	101.00
12th	...	12.37	218.59	1.92	194.88	3.50	171.05	6.80	141.03	101.00	101.00
13th	...	12.37	218.59	1.92	194.88	3.42	170.97	7.40	141.63	101.00	101.00
14th	...	12.37	218.59	1.92	194.88	3.42	170.97	7.60	141.83	101.00	101.00
15th	...	12.37	218.59	1.92	194.88	3.33	170.88	7.30	141.53	101.00	101.00
16th	...	12.37	218.59	1.92	194.88	3.33	170.88	7.20	141.43	101.00	101.00
17th	...	12.37	218.59	1.92	194.88	3.25	170.80	7.20	141.43	100.90	100.90
18th	...	12.37	218.59	1.92	194.88	3.25	170.80	7.10	141.33	100.90	100.90
19th	...	12.37	218.59	1.92	194.88	3.17	170.72	6.60	140.83	100.80	100.80
20th	...	12.37	218.59	1.92	194.88	3.17	170.72	6.20	140.43	100.70	100.70
21st	...	12.37	218.59	1.92	194.88	3.08	170.63	6.10	140.33	100.70	100.70
22nd	...	12.37	218.59	1.75	195.05	3.08	170.63	6.00	140.23	100.60	100.60
23rd	...	12.46	218.68	1.83	194.97	3.08	170.63	6.00	140.23	100.50	100.60
24th	...	12.42	218.64	1.92	194.88	3.08	170.63	6.80	141.03	100.60	100.60
25th	...	12.37	218.59	1.92	194.88	3.08	170.63	6.40	140.63	100.50	100.50
26th	...	12.33	218.55	2.08	194.72	3.00	170.55	6.00	140.23	100.50	100.50
27th	...	12.33	218.55	2.08	194.72	3.00	170.55	6.80	141.03	100.50	100.50
28th	...	12.33	218.55	2.17	194.63	3.00	170.55	6.60	140.83	100.50	100.50
29th	...	12.33	218.55	2.17	194.63	3.00	170.55	6.50	140.73	100.50	100.50
30th	...	12.29	218.51	2.17	194.63	3.00	170.55	6.60	140.83	100.50	100.50
31st	...	12.29	218.51	2.17	194.63	3.00	170.55	6.60	140.83	100.50	100.50

\* Ghat shifted to Emergent

The 19th March 1922.

## MENT, BENGAL.

*rivers Ganges, Bhagirathi, Jalangi and Brahmaputra for the month of M.S.L. as well as the lowest gauge reading since 1876.*

Rajmahal, Zero of gauge is at 36'319.		Rampur-Boalis, Zero of gauge 1'61 ft.		Goalundo, Zero of gauge is 4'396 ft. above mean sea-level.		Rerhampore, Zero of gauge 37'499.		Baranpuri, Zero of gauge 1'809.		Gauhati, Zero of gauge 136'18.	
From Bouras, 407.	From Moughyr, 120.	From Bouras, 471.	From Rajmahal, 94.	From Bouras, 991.	From Rampur- Boalis, 120.						
16th August 1913. 67'319.		20th August 1876. 8876.		20th August 1906 and 14th September 1910. 30'466		14th August 1890. 64'169.		26th September 1900. 60'08.		24th August 1906. 107'52.	
20th and 26th May 1913. 36'469.		23rd April 1886. -1'48.		28th March 1916. 7'146.		19th to 26th April 1917. 33'003.		26th March 1913. 34'109.		26th February 1886. 129'96.	
Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.	Height over zero of gauge.	Height over mean sea-level.
11	12	13	14	15	16	17	18	19	20	21	22
6'35	62'669	38'14	39'55	8'10	12'996	8'11	35'609	3'24	4'749	1'40	136'58
6'25	62'669	38'09	39'50	8'10	12'996	8'11	35'609	3'26	4'769	1'40	136'58
6'20	62'519	38'09	39'60	8'00	12'896	8'11	35'609	3'21	4'719	1'30	136'48
6'10	62'419	38'04	39'55	7'90	12'796	8'11	35'609	3'15	4'659	1'30	136'48
6'05	62'309	37'94	39'45	7'80	12'696	8'01	35'509	3'04	4'549	1'20	136'38
6'00	62'319	37'84	39'35	7'80	12'696	8'01	35'509	2'98	4'489	1'20	136'38
6'00	62'319	37'69	39'20	7'50	12'396	8'01	35'509	2'96	4'469	1'20	136'38
5'95	62'269	37'59	39'10	7'60	12'496	8'01	35'509	2'94	4'449	1'15	136'33
5'90	62'219	37'49	39'00	6'90	11'796	8'01	35'509	2'87	4'479	1'15	136'33
5'85	62'169	37'39	38'90	6'70	11'596	8'01	35'509	2'99	4'499	1'15	136'33
5'80	62'119	37'29	38'80	6'70	11'596	8'01	35'509	3'00	4'509	1'10	136'28
5'75	62'069	37'19	38'70	6'60	11'496	8'01	35'509	3'02	4'529	1'05	136'28
5'70	62'019	37'04	38'55	6'80	11'696	2'91	35'409	3'09	4'599	1'00	136'18
5'70	62'019	36'94	38'45	6'90	11'796	2'91	35'409	3'31	4'819	0'90	136'08
5'70	62'019	36'84	38'35	7'00	11'896	2'91	35'409	3'49	4'999	0'90	136'08
5'66	61'969	36'74	38'25	7'10	11'996	2'91	35'409	3'54	5'049	0'80	135'98
5'55	61'869	36'64	38'15	7'20	12'096	2'91	35'409	3'73	5'239	0'60	135'98
5'55	61'869	36'59	38'10	7'20	12'096	2'91	35'409	3'72	5'229	0'70	135'88
5'50	61'819	36'49	38'00	7'10	11'996	2'91	35'409	3'49	4'999	0'70	135'88
5'45	61'769	36'39	37'90	6'90	11'796	2'91	35'409	3'10	4'609	0'60	135'78
5'40	61'719	36'29	37'80	6'70	11'596	2'81	35'309	2'92	4'429	0'60	135'78
5'30	61'619	36'24	37'75	6'50	11'396	2'81	35'309	2'82	4'329	0'60	135'78
5'25	61'569	36'19	37'70	6'50	11'396	2'81	35'309	2'84	4'349	0'50	135'68
5'20	61'519	36'14	37'65	6'30	11'196	2'81	35'309	2'62	4'129	0'50	135'68
5'10	61'419	36'09	37'60	6'00	10'896	2'81	35'309	2'63	4'139	0'40	135'58
5'05	61'369	36'09	37'60	5'90	10'796	2'81	35'309	2'64	4'149	0'30	135'48
5'05	61'369	35'99	37'50	5'90	10'796	2'81	35'309	2'68	4'189	0'30	135'48
5'05	61'369	35'89	37'40	5'80	10'696	2'71	35'209	2'79	4'299	0'20	135'38
5'05	61'369	35'79	37'30	6'00	10'896	2'71	35'209	2'80	4'309	0'20	135'38
5'00	61'319	35'74	37'25	6'10	10'996	2'71	35'209	2'91	4'419	0'10	135'28
5'00	61'319	35'69	37'20	6'20	11'096	2'71	35'209	2'92	4'429	below zero.	134'98

Ghat on 6th January 1922

D. N. SEN GUPTA,  
Personal Assistant to Secretary  
to the Government of Bengal.



# IRRIGATION DEPARTMENT, BENGAL.

## IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1921-22.

Area leased for irrigation up to end of January 1922.

Area leased for irrigation up to end of January 1922.																		
Circle.	District.	Canal.	Headmarked fall discharge.	Average discharge in month.	Discharge utilized.	Approximate area of land irrigated during the year up to the end of the month.	Approximate area of land under irrigation up to the same date last year.	DETAILS OF AREAS LEASED.						RAINFALL, 1921-22.		RAINFALL, 1920-21.		
								Long-term lease.	Season lease.				Grand Total.	During month.	Up to end of month.	During month.	Up to end of month.	
									Acres.	Acres.	Acres.	Acres.						Acres.
S.W. Circle.	Midnapore	Midnapore	1,411	36	...	75,429	75,629	73,494	1,946	...	...	1,946	75,440	0-10	53-24	0-30	57-25	
		Panchkura	522	4	...	6,956	8,731	6,955	21	...	...	21	6,978	0-25	52-43	1-52	51-24	
		Tidal Reaches, Ranges I and II	...	...	...	...	...	...	...	...	...	...	...	0-00	37-39	1-18	55-62	
	Bardwan and Hooghly.	Total Midnapore Canal	...	...	...	82,385	85,360	80,449	1,967	...	...	1,967	82,416	...	...	...	...	
		Total of the corresponding period last year.	...	...	...	...	...	...	81,574	3,928	...	...	3,928	85,502	...	...	...	...
Bardwan and Hooghly.	Bardwan and Hooghly.	Eden Canal	1,000	4	1	21,984	22,977	21,614	688	79	10	777	22,391	0-6	61-76	0-62	44-25	
		Total of the corresponding period last year.	...	...	...	...	...	...	21,581	1,622	30	10	1,562	23,143	...	...	...	...
		GRAND TOTAL	...	...	...	104,369	108,337	102,063	2,656	79	10	2,744	104,807	...	...	...	...	...
GRAND TOTAL OF THE CORRESPONDING PERIOD OF LAST YEAR.			...	...	...	...	...	103,155	5,450	30	10	5,490	108,645	...	...	...	...	

\* Of which 880 acres are single watering.  
† Of which 28 acres are single watering and 19 acres are unauthorised irrigation.

D. N. SEN GUPTA,  
Personal Assistant to Secretary to the Government of Bengal.

CALCUTTA,  
The 17th March 1922.

## DISTRICT REPORTS ON WEATHER AND CROPS

For the week ending on the 18th March 1922.

**Summary.**—Dry weather continued. Reaping of spring crops is going on. Rain is badly needed for the growth of standing crops and for the preparation of land for and sowings of jute and other autumn crops. The average price of common rice for the province has risen by about 1 per cent. as compared with that of the previous week.

Serial No.	District and subdivision.	Rainfall.	PRICE OF COMMON RICE, IN ANNAS, PER RUPEE.		Character of the weather, condition of crops, etc.
			This week.	Previous week.	
1	2	3	4	5	6
1	24-PARGANAS	Inches. Nil	5½	5½	Lands are being prepared for aus paddy and jute. Fodder and water are sufficient.
	Diamond Harbour.	Nil	6½	6½	
	Barrackpore	Nil	(n)	6½	
	Barasat ...	Nil	6½	6½	
	Basirhat ...	Nil	7½	7½	
2	NADIA ...	Nil	7½	7½	Harvesting of rabi crops is almost finished. Rain is wanted for ploughing. Cattle-disease is reported from Karimpur, Chakda, Ranaghat, and Nabadwip thanas.
	Kushtia ...	Nil	6½	6½	
	Meherpur ...	Nil	7½	7½	
	Chnadanga ...	Nil	7½	7½	
	Ranaghat ...	Nil	6½	6½	
3	MURSHIDABAD	Nil	7	7	Prospects of standing crops are fair. Harvesting of rabi crops has commenced. Fodder is sufficient. No large import and export of rice. Cattle-disease is reported from Bharatpur thana in Kandi subdivision. Scarcity of water is experienced in Bhagwangola and Lalga thanas in Lalbagh subdivision.
	Lalbagh ...	Nil	7	7	
	Jangipur ...	Nil	7½	7½	
	Kandi ...	Nil	7½	8	
4	JESSORE ...	Nil	8	8	Weather reasonable. Harvesting of rabi crops continues. Prospects of standing crops are not favourable for want of rain. Export of paddy is reported from Jhenidah subdivision. Fodder is sufficient but water is rather scarce.
	Jhenidah ...	Nil	9	9	
	Magura ...	Nil	9	9	
	Narail ...	Nil	9	9	
	Bongaon ...	Nil	8½	8½	
5	KHULNA ...	Nil	8	8	Want of rain is retarding the agricultural operations. Scarcity of drinking water is beginning to be felt in many places. No cattle-disease is reported.
	Satkhira ...	Nil	8	8	
	Bagerhat ...	Nil	7½	8	

(n) Not reported.